





May 2023

2023 WASTE AUDIT REPORT

Prepared for F&P Manufacturing Inc. 1 Nolan Road Tottenham, Ontario LOG 1W0 Prepared by Waste Solutions 392 Colborne Street London, Ontario N6B 2S9



EXECUTIVE SUMMARY

Waste Solutions conducted a waste audit at 1 Nolan Road for F&P Manufacturing Inc. to achieve compliance with *Ontario Regulation 102/94: Waste Audits and Waste Reduction Work Plans* (Ontario Regulation 102/94) set by the Ministry of the Environment, Conservation and Parks (MOE).

The audit was conducted on May 30, 2023 and followed the Recycling Council of Ontario's (RCO) Standard Waste Audit Methodology (SWAM). Waste Solutions analyzed a 24-hour sample of waste that consisted of all the non-hazardous, solid waste generated from regular activities at the site, including waste destined for reuse, recycle, and disposal. Table 1 provides a summary of the audit findings.

Table 1. Summary of audit findings.

	PLANT 1		PLANT 2		OVERALL	
	SAMPLE VALUE	ANNUAL VALUE	SAMPLE VALUE	ANNUAL VALUE	SAMPLE VALUE	ANNUAL VALUE
TOTAL WASTE GENERATED	210.29 kg	24,560,027.39 kg	136.04 kg	252,920.00 kg	130.49 kg	24,812,947.39 kg
TOTAL WASTE SENT TO ENERGY RECOVERY	210.29 kg	101,050.00 kg	136.04 kg	29,440.00 kg	130.49 kg	130,490.00 kg
TOTAL WASTE SENT TO LANDFILL	N/A	28,620.00 kg	N/A	N/A	N/A	28,620.00 kg
TOTAL WASTE DIVERTED THROUGH RECYCLING STREAMS	N/A	24,430,357.39 kg	N/A	223,480.00 kg	N/A	24,653,837.39 kg
OVERALL DIVERSION RATE	99.47%		88.36%		99.36%	
OVERALL CAPTURE RATE		99.97%	9	6.39%		99.87%

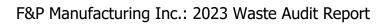
In addition, Waste Solutions observed the site's current waste collection, handling, and storage practices, as well as the organization's culture and attitude towards sustainability and waste diversion. Using the information gathered through the site observations and the waste audit, Waste Solutions created meaningful recommendations to increase the site's diversion and capture rates; improve on-site waste collection and handling processes; and inspire change within the culture of the organization. The following recommendations were created for F&P Manufacturing Inc:

- 1. The 3 R's recommendation
- 2. Optimize diversion streams
- 3. Continuous monitoring



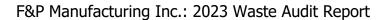
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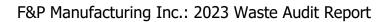


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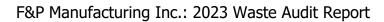
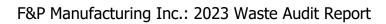




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1.0 INTRODUCTION

On May 30, 2023, Waste Solutions conducted a waste audit of 1 Nolan Road, Tottenham, Ontario, on behalf of F&P Manufacturing Inc. Table 2 provides a description of the site.

The purpose of the audit and this waste audit report is to achieve compliance with *Ontario Regulation 102/94: Waste Audits and Waste Reduction Work Plans* (Ontario Regulation 102/94), and confirm compliance with *Ontario Regulation 103/94: Industrial, Commercial and Institutional Source Separation Programs* (Ontario Regulation 103/94). Additionally, Waste Solutions evaluated whether F&P Manufacturing Inc complies with the acceptance criteria set by the site's waste haulers.

The waste audit was completed as per the Standard Waste Audit Methodology (SWAM) set by the Recycling Council of Ontario (RCO).

Table 2. Description of the site.

	DESCRIPTION		
Name of Site	F&P Manufacturing Inc.		
Site Address	1 Nolan Road, Tottenham, Ontario		
Size	441,000 ft ²		
Type of Establishment	Manufacturing		
Environmental Certification	ISO 14001		

The following audit was designed to exceed the minimum guidelines for waste audits as set forth by Canadian provincial regulatory authorities. The conclusions, observations, and recommendations contained in the report represent the opinions of Waste Solutions. The information in this report was provided to Waste Solutions by the client, its representatives, and partners. As a result, Waste Solutions has relied on the information to be accurate and for which no assurances are intended and no representations or warranties are made. This report and the information contained herein is produced for the expressed use of F&P Manufacturing Inc. and the Ministry of the Environment, Conservation and Parks. Waste Solutions prohibits redistribution of this report and the material contained herein in whole or part without expressed written permission of Waste Solutions.



1.1 AUDIT SCOPE

Waste Solutions conducted a waste audit of F&P Manufacturing Inc., located at 1 Nolan Road, Tottenham, Ontario, on May 30, 2023. Waste Solutions analyzed a 24-hour sample of waste that consisted of all the non-hazardous, solid waste generated from regular activities at the site between 7:00 a.m. on May 29 and 7:00 a.m. on May 30, 2023.

Waste excluded from the audit included:

- 1. hazardous waste;
- 2. non-solid waste; and
- 3. temporary waste generation not representative of a typical day at the site.

1.2 AUDIT OBJECTIVES

The main objectives of the audit were to:

- 1. Achieve compliance with Ontario Regulation 102/94 by conducting a waste audit on a representative sample of waste generated at the site under normal operating conditions.
- 2. Confirm effective implementation of a source separation program in compliance with Ontario Regulation 103/94.
- 3. Identify if the site meets the waste hauler's acceptance criteria, including the allowable contamination limits and storage methods.
- 4. Recommend initiatives to increase the site's diversion and capture rates; improve on-site waste collection and handling processes; and inspire change within the culture of the organization.

1.3 AUDIT CRITERIA: ONTARIO REGULATION 102/94 AND ONTARIO REGULATION 103/94

Ontario Regulation 102/94 requires the owner or operator of a manufacturing establishment to annually complete a waste audit and implement a waste reduction work plan if during the two preceding calendar years, there was a calendar month in which the hours worked by the persons employed at the site exceed 16,000 hours.

Under Ontario Regulation 102/94, the audit must address:

- a) the amount, nature, and composition of the waste;
- b) the manner by which the waste gets produced, including management decisions and policies that relate to the production of waste; and
- c) the way in which the waste is managed (Ontario Regulation 102/94, s. 2.).





Ontario Regulation 103/94 requires the owner or operator of a manufacturing establishment to implement a source separation program for the following materials, if during the two preceding calendar years, there was a calendar month in which the hours worked by the persons employed at the site exceed 16,000 hours:

- 1. Aluminum
- 2. Cardboard (corrugated)
- 3. Fine paper
- 4. Glass
- 5. Newsprint
- 6. Polyethylene (high density) jugs, pails, creates, totes, and drums
- 7. Polyethylene (linear low density and low density) film
- 8. Polystyrene (expanded) foam
- 9. Polystyrene trays, reels and spools
- 10. Steel
- 11. Wood (not including painted, treated, or laminated wood)

The source separation program must include provisions for the collection, handling, and storage of separated waste before it is delivered to a site with the capability and approval to handle source separated waste. In addition, the program must be effectively communicated to all employees, and patrons. Reasonable efforts must be made to ensure separated waste is reused or recycled.



1.4 AUDIT CRITERIA: HAULER'S ACCEPTANCE CRITERIA

The current waste collection and handling equipment utilized at the site are outlined in Table 3.

Table 3. The site's waste collection and handling equipment.

EQUIPMENT	STREAM	HAULER	
2 x 40-yard bins	Mixed Waste (Energy Recovery)		
1 x 14-yard bin	Sludge (Landfill)	U-Pak	
2 x 40-yard bins	Cardboard Recycling Stream		
1 x 20-yard bin	Mixed Recycling Stream	U-Pak	
1 x 8-yard bin	Mixed Recycling Stream		
1 x 40-yard bin	Wood Recycling Stream		
Unknown	Scrap Metal Recycling Stream	Triple M	
Cardboard Box	Electronic Waste Recycling Stream	U-Pak	
Fibre Drums	Fluorescent Lights Recycling Stream	Ideal Supply	
Metal Drums	Batteries Recycling Stream	GFL	
Wood Skids	Wood Skids Reuse Stream Murdock Mackay L		



2.0 SOURCE SEPARATION PROGRAM

Table 4 indicates what materials are currently source separated for diversion at the site. Apart from LDPE #4, F&P Manufacturing Inc. has implemented a source separation program in compliance with Ontario Regulation 103/94.

Table 4. Material categories that are source separated at the site.

DIVERTIBLE MATERIAL CATEGORIES	IS SOURCE SEPARATION REQUIRED BY ONTARIO REGULATION 103/94?	IS THE MATERIAL CURRENTLY SOURCE SEPARATED?		
PET #1		✓		
HDPE #2	✓	✓		
LDPE #4	✓	Х		
PP #5		✓		
PS-C #6	✓	✓		
Aluminum	✓	✓		
Steel	✓	✓		
Glass	✓	✓		
Gable top containers		✓		
Tetra Pak containers		✓		
OCC	✓	✓		
Boxboard		✓		
Fine Paper	✓	✓		
Newsprint	✓	✓		
Food waste		✓		
Scrap Metal	✓	✓		
Wood	✓	✓		
Wood Skids		✓		



3.0 METHODOLOGY



COLLECTION
PERIOD

3.1 COLLECTION PERIOD

From 7:00 a.m. on May 29 to 7:00 a.m. on May 30, 2023, F&P Manufacturing Inc. staff collected all the non-hazardous, solid waste generated at 1 Nolan Road.

F&P Manufacturing Inc. staff were instructed to label each bag of waste with:

- 1. the collection location (i.e. the area of the building the bag was collected from); and
- 2. the waste stream (i.e. waste to energy recovery).



3.2 SITE REVIEW

Waste Solutions conducted a site review with F&P Manufacturing Inc. management to gain a better understanding of how waste is generated and managed at 1 Nolan Road.



3.3 WASTE ANALYSIS

Once on-site, Waste Solutions weighed and analyzed the 24-hour waste sample to determine the amount, nature, and composition of the waste generated at 1 Nolan Road. Waste was classified into the material categories stated in Table 5. The middle column of Table 5, "Colour," indicates the colour used to represent each material category in the graphs within section 4.0 Waste Audit Results.



Table 5. The material categories used to classify waste at the audit.

TYPE OF WASTE	COLOUR	MATERIAL CATEGORY
		Expanded polystyrene (PS-E #6)
		Unlabeled plastic (P #7)
		Tissues & paper towel
		Sludge
		Disposable food packaging (DFP)
Mixed Waste		Coffee cups
Wilked Waste		Textile gloves
		Personal protective equipment
		Non-recyclable packaging
		Labels and label backing
		Other waste
		Tissues & paper towel
		Polyethylene terephthalate (PET #1)
		High-density polyethylene (HDPE #2)
		Low-density polyethylene (LDPE #4)
		Polypropylene (PP #5)
		Condensed polystyrene (PS-C #6)
		Aluminum
Recyclable Material		Steel
Necyclable Waterial		Glass
		Polycoat containers
		Scrap metal
		Cardboard (OCC)
		Boxboard
		Paper
		Scrap wood
Organic Material		Solid food waste (Food waste)
Organic iviaterial		Other organic materials

¹The "miscellaneous" waste category is comprised of: Labels, banding, floor sweepings, shoes, Lysol wipes, coffee pods, a planner, and Silica, bubble wrap, banding, floor sweeps, absorbent pads, labels, salt packaging, markers, plugs, textiles straps, and assorted parts.





3.4 ANNUAL EXTRAPOLATION CALCULATIONS

Following the on-site visit, Waste Solutions used U-Paks' report provided by F&P Manufacturing to calculate the annual amount (in kilograms) of waste generated, diverted, and disposed of at 1 Nolan Road.

The data used in the report corresponds to the following streams generated from May 2022 to April 2023:

- Mixed Waste (Energy Recovery)
- Sludge (Landfill)
- Cardboard Recycling Stream
- Mixed Recycling Stream
- Scrap Metal Recycling Stream
- Wood Recycling Stream



3.5 CREATION OF RECOMMENDATIONS

Lastly, Waste Solutions created unique recommendations to increase the site's diversion and capture rates; improve on-site waste collection and handling processes; and inspire change within the culture of the organization.

3.6 STATEMENT OF SAMPLING LIMITATIONS

Data collected during the on-site audit are based on the samples analyzed and information reviewed. While effort was taken to ensure data was representative of a typical day, it must be noted that the accuracy of all data is limited by these assumptions and cannot be absolute.



4.0 WASTE AUDIT RESULTS

4.1 SUMMARY OF RESULTS – OVERALL

Table 6 provides a summary of the audit findings.

Table 6. Summary of audit findings.

	PLANT 1		PLANT 2		OVERALL	
	SAMPLE VALUE	ANNUAL VALUE	SAMPLE VALUE	ANNUAL VALUE	SAMPLE VALUE	ANNUAL VALUE
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TOTAL WASTE DIVERTED THROUGH RECYCLING STREAMS	N/A	24,430,357.39 kg	N/A	223,480.00 kg	N/A	24,653,837.39 kg
OVERALL DIVERSION RATE	99.47%		88.36%			99.36%
OVERALL CAPTURE RATE	99.97% 96.39% 99		99.87%			

General Observations

- The diversion rate at F&P Manufacturing is 99.36%. In total, 24,653,837.39 kg of waste is diverted annually, with 98.15% of the total diverted waste being scrap metal.
- Without scrap metal accounted for, the total diversion rate is 65.27%. Therefore, staff
 education, continuous monitoring, and the implementation of the 3R programs will
 increase this diversion rate.
- A total of 42,239.11 kg textile gloves were disposed of onsite, accounting for 32.37% of the total waste sent to energy recovery. Implementing a laundry service for these gloves would greatly decrease this number.
- In total, 9,730.02 kg of LDPE (#4) was produced on site. However, due to the lack of haulers in this area providing a recycling program for this material, it is sent to the waste to energy stream.



4.1.1 TOTAL WASTE GENERATED

The total amount of waste generated at 1 Nolan Road between May 2022 and April 2023 was 24,812.947.39 kg. This weight includes:

- 1. the total annual amount of waste sent to energy recovery;
- 2. the total annual amount of waste sent to landfill;
- 3. the total annual amount of waste diverted through the mixed recycling stream;
- 4. the total annual amount of waste diverted through the cardboard recycling stream;
- 5. the total annual amount of waste diverted through the wood recycling stream; and
- 6. the total annual amount of waste diverted through the scrap metal recycling stream.

Figure 1 provides a breakdown of how the waste generated at 1 Nolan Road was source separated on-site, including what percentage of generated waste was sent to energy recovery and landfill, and what percentage of generated waste was diverted and what diversion streams were utilized.

Figure 2 displays the total amount of waste generated by material category.

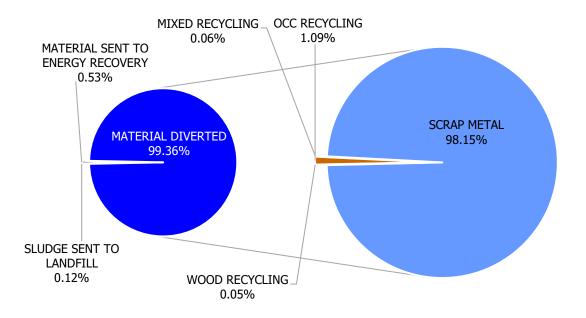
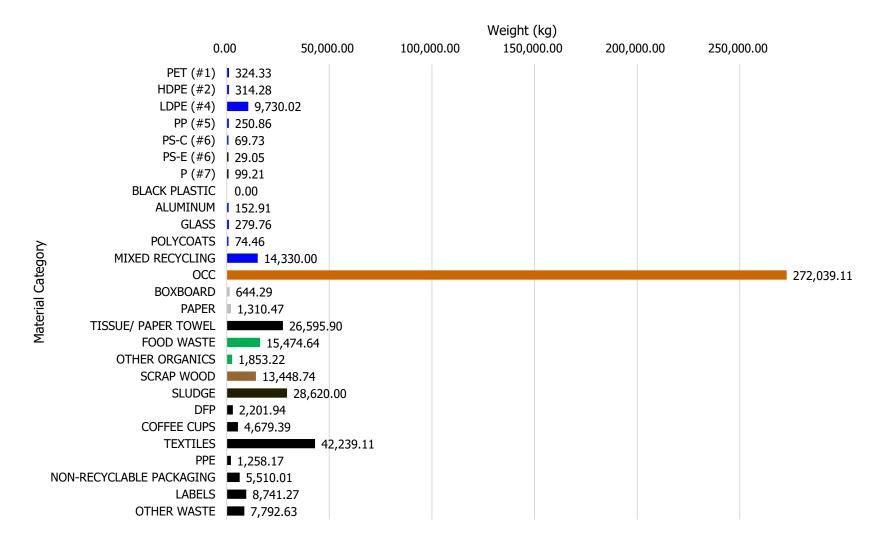


Figure 1. A breakdown of how waste was source separated at the site.





Scrap metal accounted for 24,354,877.37 kg and OCC accounted for 272,039.11 kg and were not included in the graph due to the limitations in scale.

Figure 2. Waste generated by material category, shown in kilograms.



4.1.2 TOTAL WASTE SENT TO ENERGY RECOVERY

The total amount of waste sent to energy recovery at 1 Nolan Road between May 2022 and April 2023 was 130,490.00 kg. Figure 3 displays the total amount of waste by material category.



Figure 3. Waste sent to energy recovery by material category, shown in kilograms.



4.1.2.1 Waste Sent to Energy Recovery: Breakdown by Plant

Figure 4 illustrates how much waste each plant is contributing to the overall disposal of waste to energy recovery, providing that they generated waste during the 24-hour sample period and their waste bags were correctly labelled.

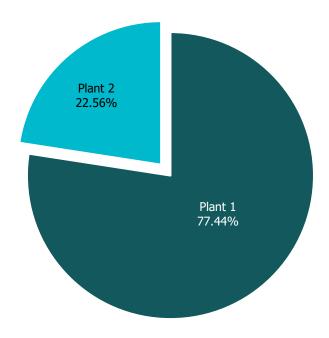


Figure 4. Plant contribution to the waste to energy recovery stream, shown in percent.



4.1.2.2 Divertible Materials Found in the Waste to Energy Recovery

31,343.33 kg or 24.02% of the material found in the waste to energy recovery stream had the potential to be diverted through the currently recycling programs in place. The percentage of recyclable materials and compostable (organic) materials sent to energy recovery can be seen in Figure 5.

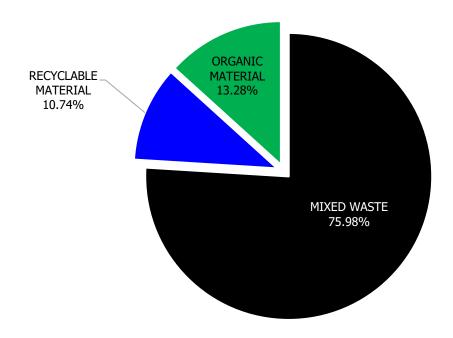


Figure 5. The composition of the waste to energy recovery stream, shown in percent.

Photographs of recyclable materials and compostable materials found in the waste to energy recovery stream during the waste audit can be found in Appendix B & C: Photo Log.



14,015.46 kg or 10.74% of the material found in the waste to energy recovery stream was recyclable. If disposed of correctly, this material could have been diverted through the recycling streams. Notably, LDPE (#4) is currently not being diverted due to absence in recycling market. A breakdown of the recyclable material found in the waste to energy recovery stream is shown in Figure 6.

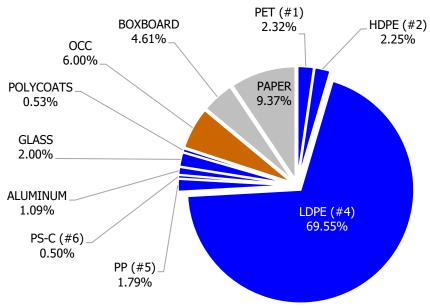


Figure 6. Recyclable materials found in the waste to energy recovery stream, shown in percent.

17,327.87 kg or 13.28% of the material found in the waste to energy recovery stream was compostable. This material could have been diverted through a composting stream if operating onsite. A breakdown of the organic material found in the waste to energy recovery stream is shown in Figure 7.

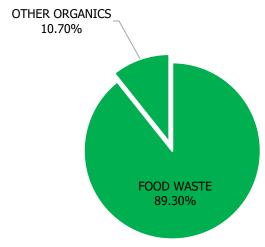


Figure 7. Organic materials found in the waste to energy recovery stream, shown in percent.



4.1.3 TOTAL WASTE SENT TO LANDFILL

The total amount of waste sent to landfill at 1 Nolan Road between May 2022 and April 2023 was 28,620.00 kg. Figure 8 displays the total amount of waste sent to landfill by material category.

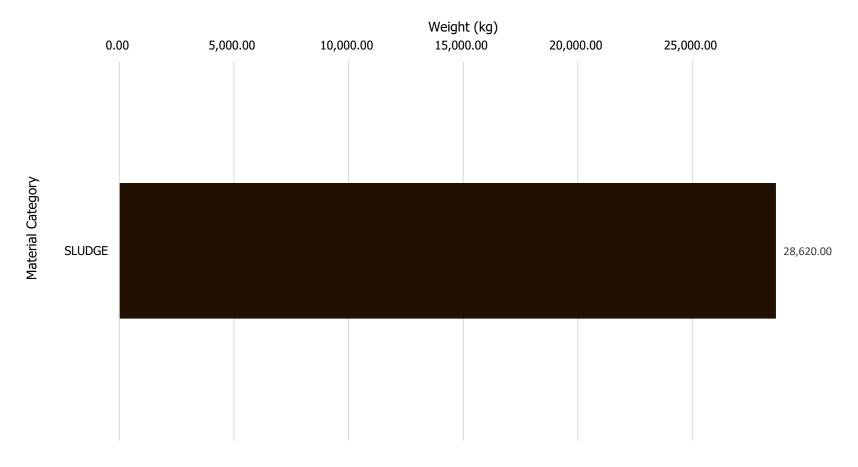


Figure 8. Waste sent to landfill by material category, shown in kilograms.



4.1.4 TOTAL WASTE DIVERTED THROUGH RECYCLING STREAMS

The total amount of waste diverted through recycling stream at 1 Nolan Road between May 2022 and April 2023 was 24,653,837.39 kg. Figure 9 displays the total amount of waste diverted by material category.

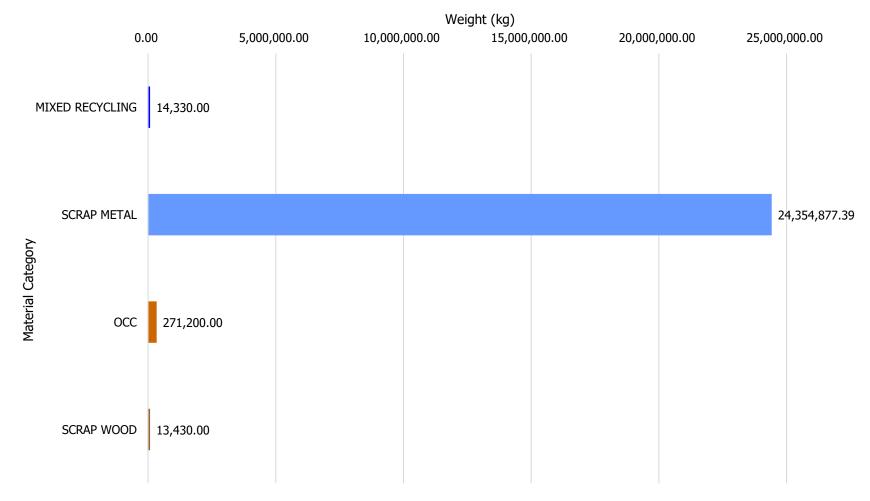


Figure 9. Waste diverted by material category, shown in kilograms.



4.1.5 CAPTURE RATES

Capture rate provides an indication of how well a site's diversion streams are operating. The overall capture rate at 1 Nolan Road was 99.87%, meaning that 99.87% of all the divertible materials generated on-site were correctly source separated and diverted from energy recovery stream. The remaining 0.13% of divertible materials were incorrectly source separated and sent to energy recovery, even though they could have been diverted through one of the diversion streams currently operating at the site. Figures 10 identifies the capture rates for each divertible material category of waste.

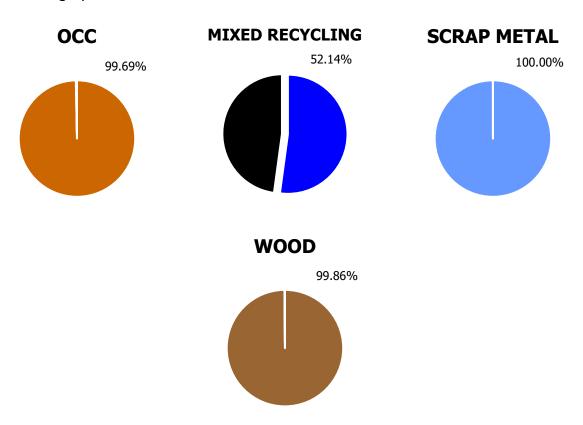
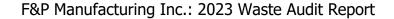


Figure 10. The capture rates for each divertible material category, shown in percent.





4.1.6 CONCLUSION

In total, 42,239.11 kg of textile gloves were sent to an energy recovery facility. A majority of the gloves were generated by Plant 1, accounting for 99.40% of the total.

Furthermore, 20.38% of the overall total waste sent to energy recovery was paper towel. Between the two plants, 26,595.90 kg of paper towel was produced, with 24,804.58 kg of this total weight coming from Plant 1.

Overall, 99.94% of recyclable material was correctly source separated in the recycling streams (mixed recycling, cardboard, wood, and scrap metal streams). The remaining 0.06% was incorrectly source separated and sent to energy recovery. In total, 9,730,02 kg of LDPE 4 was produced between the sites, accounting for 7.46% of the total waste sent to energy recovery. Therefore, by implementing a recycling program for LDPE 4, the site's diversion and capture rate should increase.

Between both the site samples, 15,474.64 kg of food waste was observed, representing 11.86% of the waste sent to energy from waste. When the composting program resumes in July this waste will be able to be diverted from energy recovery.

Please refer to section 5.0 Recommendations for a list of initiatives that could be implemented at 1 Nolan Road to improve the site's diversion from energy recovery performance.



4.2 SUMMARY OF RESULTS – PLANT 1

Table 7 provides a summary of the audit findings.

Table 7. Summary of audit findings at Plant 1.

	SAMPLE VALUE	ANNUAL VALUE	
TOTAL WASTE GENERATED	210.29 kg	24,560,027.39 kg	
TOTAL WASTE SENT TO ENERGY RECOVERY	233.95 kg	101,050.00 kg	
TOTAL WASTE SENT TO LANDFILL	N/A	28,620.00 kg	
TOTAL WASTE DIVERTED THROUGH RECYCLING STREAMS	0.00 kg	24,430,357.39 kg	
OVERALL DIVERSION RATE	99.47%		
OVERALL CAPTURE RATE	99.97%		

General Observations

- At Plant 1 the diversion rate is 99.47%. A large contributor to this diversion rate is the scrap metal recycling stream, which accounts for 99.47% of the materials diverted.
- Without scrap metal accounted for, the total diversion rate is 36.79%. Therefore, staff
 education, continuous monitoring, and the implementation of the 3R programs will
 increase this diversion rate.
- A total of 41,983.75 kg textile gloves were disposed of onsite, accounting for 41.55% of the total waste sent to energy recovery. Implementing a laundry service for these gloves would greatly decrease this number.
- 24,804.58 kg of paper towel was produced on site. The hand wash station was the highest contributor of paper towel to the energy recovery stream, accounting for 24.55% of all paper towel produced at Plant 1.



4.2.1 TOTAL WASTE GENERATED

The total amount of waste generated at Plant 1 between May 2022 and April 2023 was 24,560,027.39 kg. This weight includes:

- 1. the total annual amount of waste sent to energy recovery;
- 2. the total annual amount of waste sent to landfill;
- 3. the total annual amount of waste diverted through the mixed recycling stream;
- 4. the total annual amount of waste diverted through the cardboard recycling stream;
- 5. the total annual amount of waste diverted through the wood recycling stream; and
- 6. the total annual amount of waste diverted through the scrap metal recycling stream.

Figure 11 provides a breakdown of how the waste generated at Plant 1 was source separated onsite, including what percentage of generated waste was sent to energy recovery and landfill, and what percentage of generated waste was diverted and what diversion streams were utilized.

Figure 12 displays the total amount of waste generated by material category.

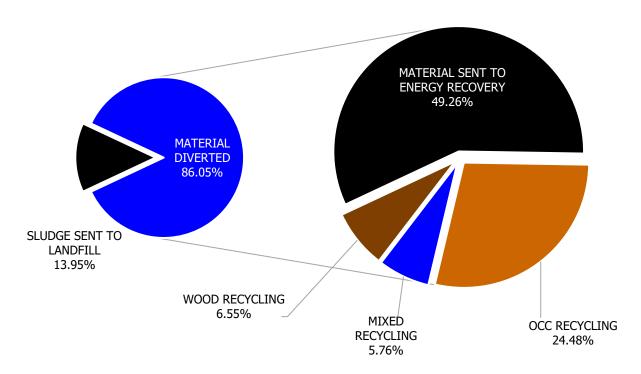
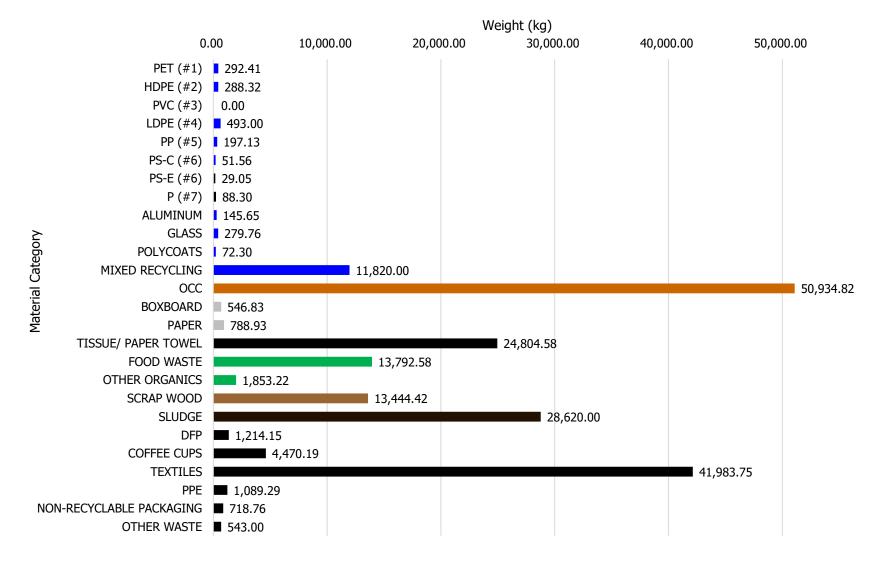


Figure 11. A breakdown of how waste was source separated at the site.

Scrap metal accounted for 24,354,877.39 kg and was not included in the graph due to the limitations in scale.





Scrap metal accounted for 24,354,877.39 kg and was not included in the graph due to the limitations in scale.

Figure 12. Waste generated by material category, shown in kilograms.



4.2.2 TOTAL WASTE SENT TO ENERGY RECOVERY

The total amount of waste sent to energy recovery at Plant 1 between May 2022 and April 2023 was 101,050.00 kg. Figure 13 displays the total amount of waste by material category.

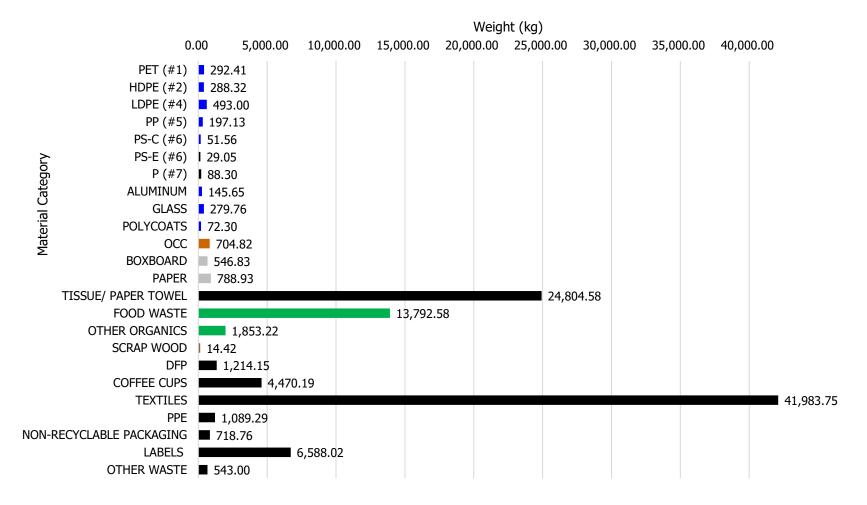


Figure 13. Waste sent to energy recovery by material category, shown in kilograms.



4.2.2.1 Waste Sent to Energy Recovery: Breakdown by Area

Table 8 lists how much waste each area is contributing to the overall disposal of waste to energy recovery, providing that they generated waste during the 24-hour sample period and their waste bags were correctly labelled. Please note that if a portion of the waste sample was not labelled with area information, that waste has been grouped together and identified as "Unlabelled."

Table 8. Total waste sent to energy recovery by area at Plant 1.

AREA	ANNUAL	SAMPLE VALUE	%
	VALUE (kg)	(kg)	90
A - Cafeteria	6,141.13	12.78	6.08%
A - Civic	4,954.23	10.31	4.90%
A - CRV	624.68	1.30	0.62%
A - Hydro	547.80	1.14	0.54%
A - Line LWCFS 3725	1,081.19	2.25	1.07%
A - Lines G, H, K, L, M, W	10,489.90	21.83	10.38%
A - Paint Office	91.30	0.19	0.09%
A - WCBV/WCVL & WMBC Line D	2,585.23	5.38	2.56%
B - Cafeteria	5,458.79	11.36	5.40%
B - Civic Small Parts	643.91	1.34	0.64%
B - CRV/Civic Nut Welding	2,489.13	5.18	2.46%
B - ISD Office	259.48	0.54	0.26%
B - IWCFL, WCSR I & J	3,959.54	8.24	3.92%
B - Lines F, H, K, L, M, W	5,593.33	11.64	5.54%
B - Nursing Station	0.00	0.00	0.00%
B - Production Office	1,475.22	3.07	1.46%
B - Purchasing Office & Boardroom	384.42	0.80	0.38%
B - Quality Area & Storeroom	1,403.14	2.92	1.39%
B - Stamping Office	259.48	0.54	0.26%
B - TIR/Accounting	288.32	0.60	0.29%
B - TYA & TZS	456.50	0.95	0.45%
C - Cafeteria	11,129.00	23.16	11.01%
C - Civic	1,874.05	3.90	1.85%
C - CRV	523.77	1.09	0.52%
C - IWCFL	201.82	0.42	0.20%
C - Line 2/3, SP Line & TYA/Line D	2,936.02	6.11	2.91%
C - Nut Line	389.23	0.81	0.39%
Café Washrooms	1,960.55	4.08	1.94%
Front Entrance	807.29	1.68	0.80%
Handwash Stations	5,929.70	12.34	5.87%
Lobby Security	1,417.55	2.95	1.40%
Men's Locker & Washrooms	5,165.66	10.75	5.11%



Area	Annual Value (kg)	Sample Value (kg)	%
Paint Beam Line	3,676.03	7.65	3.64%
Paint Small Parts	1,874.05	3.90	1.85%
Paint Washrooms	1,489.63	3.10	1.47%
Satellite Cafeteria & Washrooms	2,133.54	4.44	2.11%
Unlabelled	5,934.51	12.35	5.87%
Washrooms	1,898.08	3.95	1.88%
Women's Locker & Washrooms	2,522.77	5.25	2.50%
Total	101,050.00	210.29	

Considering the large number of areas, the composition of each individual area's waste to energy recovery stream can be found in Appendix D. Please note that material categories that contributed less than 1.00% of an area's total disposal of waste to recovery energy were not labelled in these figures.



4.2.2.2 Divertible Materials Found in the Waste to Energy Recovery

19,506.49 kg or 19.30% of the material found in the waste to energy recovery stream had the potential to be diverted through the currently recycling programs in place. The percentage of recyclable materials and compostable (organic) materials sent to energy recovery stream can be seen in Figure 14.

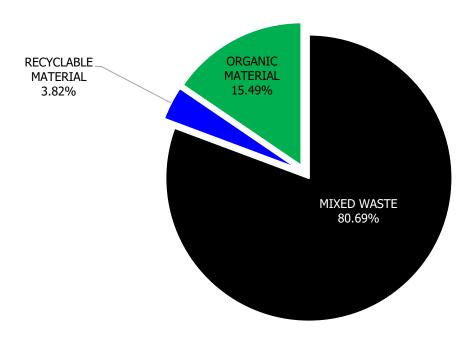


Figure 14. The composition of the waste to energy recovery stream, shown in percent.

Photographs of recyclable materials and compostable materials found in the waste to energy recovery stream during the waste audit can be found in Appendix B: Photo Log – Plant 1.



3,860.69 kg or 3.82% of the material found in the waste to energy recovery stream was recyclable. If disposed of correctly, this material could have been diverted through the recycling streams. Notably, LDPE (#4) is currently not being diverted due to absence in recycling market. A breakdown of the recyclable material found in the waste to energy recovery stream is shown in Figure 15.

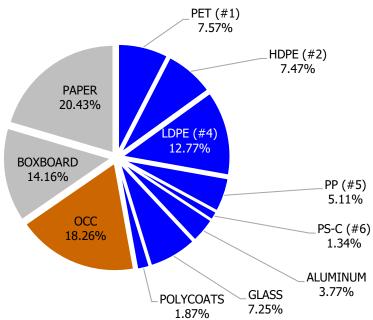


Figure 15. Recyclable materials found in the waste to energy recovery stream, shown in percent.

15,645.80 kg or 15.48% of the material found in the waste to energy recovery stream was compostable. This material could have been diverted through a composting stream if operating onsite. A breakdown of the organic material found in the waste to energy recovery stream is shown in Figure 16.

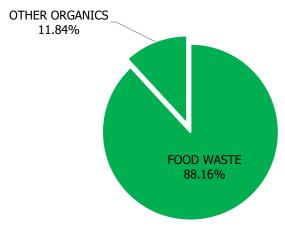


Figure 16. Organic materials found in the waste to energy recovery stream, shown in percent.



4.2.3 TOTAL WASTE SENT TO LANDFILL

The total amount of waste sent to landfill at Plant 1 between May 2022 and April 2023 was 28,620.00 kg. Figure 17 displays the total amount of waste sent to landfill by material category.

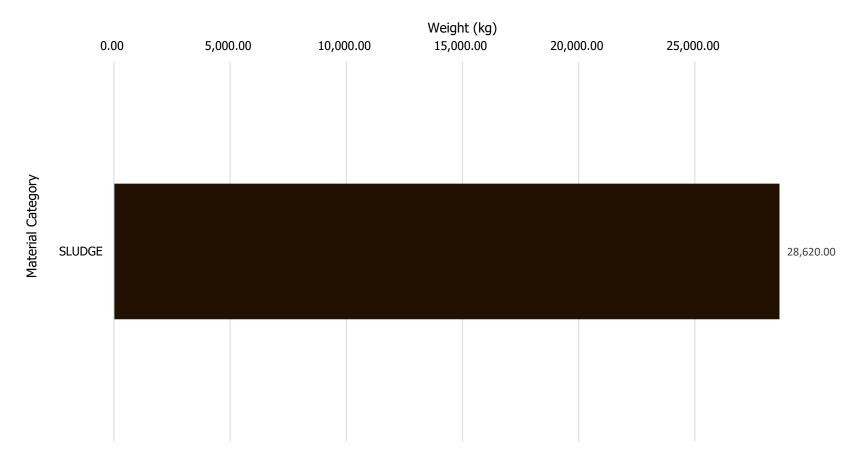
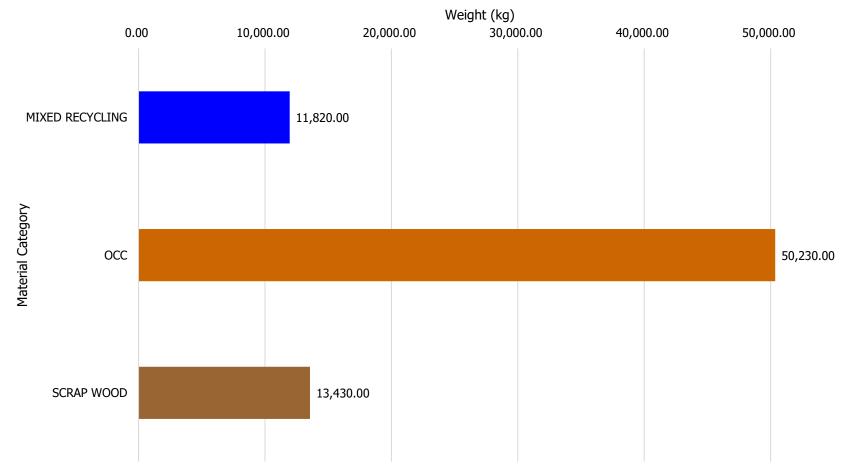


Figure 17. Waste sent to landfill by material category, shown in kilograms.



4.2.4 TOTAL WASTE DIVERTED THROUGH RECYCLING STREAMS

The total amount of waste diverted through recycling streams at Plant 1 between May 2022 and April 2023 was 24,430,357.39 kg. Figure 18 displays the total amount of waste diverted by material category.



Scrap metal accounted for 24,354,877.39 kg and was not included in the graph due to the limitations in scale.

Figure 18. Waste diverted by material category, shown in kilograms.



4.2.5 CAPTURE RATES

Capture rate provides an indication of how well a site's diversion streams are operating. The overall capture rate at Plant 1 was 99.97%, meaning that 99.97% of all the divertible materials generated on-site were correctly source separated and diverted from energy recovery stream. The remaining 0.03% of divertible materials were incorrectly source separated and sent to energy recovery, even though they could have been diverted through one of the diversion streams currently operating at the site. Figures 19 identifies the capture rates for each divertible material category of waste.

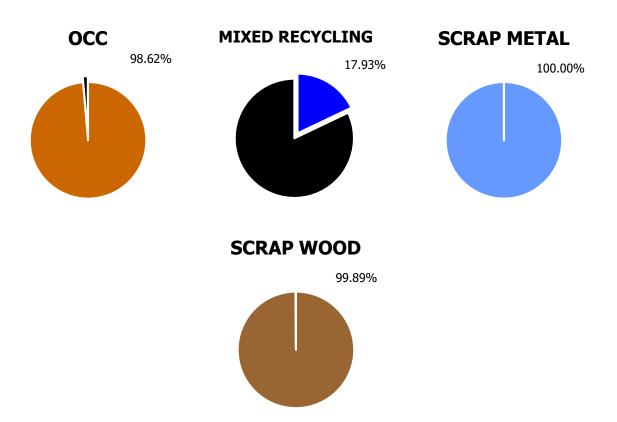
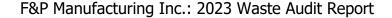


Figure 19. The capture rates for each divertible material category, shown in percent.





4.2.6 CONCLUSION

In total, 41,938.75 kg of textile gloves were sent to energy recovery in Plant 1. This represents 41.55% of the total weight of materials sent to energy recovery.

In addition, 24,804.58 kg of paper towel was observed within the sample, accounting for 24.55% of the total sample weight at Plant 1.

Further, 99.75 % of recyclable material was correctly source separated in the recycling streams. With the use of a recycling program that properly disposes of LDPE 4, this number could be even higher.

Within the sample, 28.70 kg of food waste was observed, accounting for 13.65% of the total sample weight.

Please refer to section 5.0 Recommendations for a list of initiatives that could be implemented at 1 Nolan Road to improve the site's diversion from energy recovery performance.



4.3 SUMMARY OF RESULTS – PLANT 2

Table 9 provides a summary of the audit findings.

Table 9. Summary of audit findings at Plant 2.

	SAMPLE VALUE	ANNUAL VALUE
TOTAL WASTE GENERATED	136.04 kg	252,920.00 kg
TOTAL WASTE SENT TO ENERGY RECOVERY	136.04 kg	29,440.00 kg
TOTAL WASTE DIVERTED THROUGH RECYCLING STREAMS	0.00 kg	223,480.00 kg
OVERALL DIVERSION RATE	88.36%	
OVERALL CAPTURE RATE	94.98%	

General Observations

- At Plant 2 the diversion rate is 88.36%. A large contributor to this diversion rate is the cardboard recycling stream, which accounts for 98.88% of the materials diverted.
- In total, 9,216.70 kg of LDPE (#4) was produced on site. Overall, Plant 2 accounts for 94.93% of the total LDPE (#4) produced at F&P Manufacturing. However, due to the lack of haulers in this area providing a recycling program for this material, it is sent to the energy recovery stream.



4.3.1 TOTAL WASTE GENERATED

The total amount of waste generated at Plant 2 between May 2022 and April 2023 was 252,920.00 kg. This weight includes:

- 1. the total annual amount of waste sent to energy recovery;
- 2. the total annual amount of waste diverted through the mixed recycling stream, and;
- 3. the total annual amount of waste diverted through the cardboard recycling.

Figure 20 provides a breakdown of how the waste generated at Plant 2 was source separated onsite, including what percentage of generated waste was sent to energy recovery, and what percentage of generated waste was diverted and what diversion streams were utilized.

Figure 21 displays the total amount of waste generated by material category.

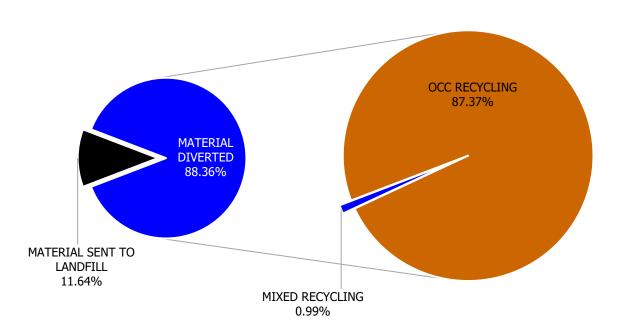


Figure 20. A breakdown of how waste was source separated at the site.



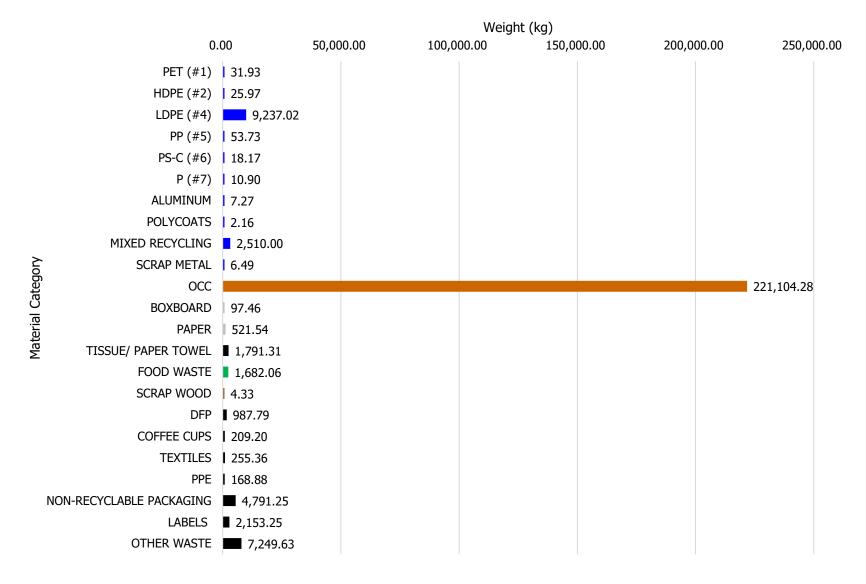


Figure 21. Waste generated by material category, shown in kilograms.



4.3.2 TOTAL WASTE SENT TO ENERGY RECOVERY

The total amount of waste sent to energy recovery at Plant 2 between May 2022 and April 2023 was 29,440.00 kg. Figure 22 displays the total amount of waste by material category.

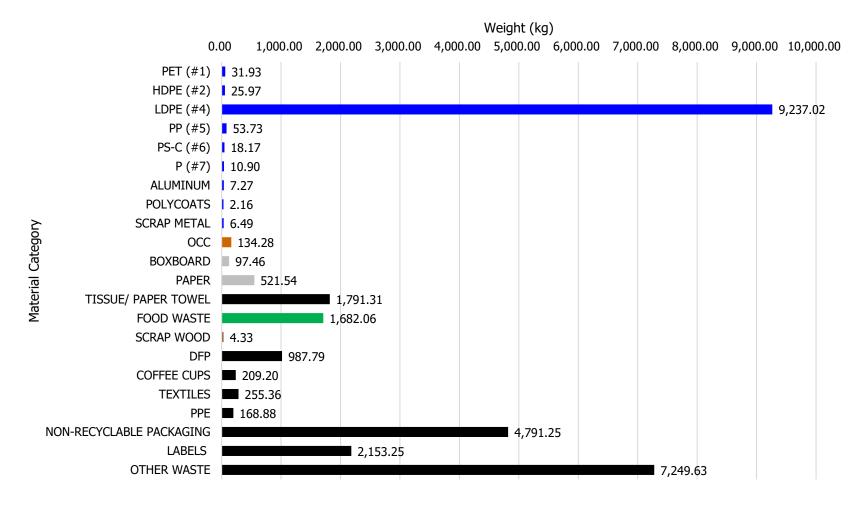


Figure 22. Waste sent to energy recovery by material category, shown in kilograms.

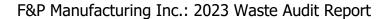


4.3.2.1 Waste Sent to Energy Recovery: Breakdown by Area

Table 10 lists how much waste each area is contributing to the overall disposal of waste to energy recovery, providing that they generated waste during the 24-hour sample period and their waste bags were correctly labelled. Please note that if a portion of the waste sample was not labelled with area information, that waste has been grouped together and identified as "Unlabelled."

Table 10. Total waste sent to energy recovery by area at Plant 2.

Area	Annual Value	Sample Value	%
Aica	(kg)	(kg)	70
A - ABPB	1,120.99	5.18	3.81%
A - ACCB	1,428.29	6.60	4.85%
A - ACRC	0.00	0.00	0.00%
A - ACRK	1,281.13	5.92	4.35%
A - ACRM	482.59	2.23	1.64%
A - ACTA	999.80	4.62	3.40%
A - ACUA	0.00	0.00	0.00%
A - ASRK	1,179.42	5.45	4.01%
A - AVFL	0.00	0.00	0.00%
A - AVLA	1,073.38	4.96	3.65%
A - AVUP	387.37	1.79	1.32%
A - AVVP	584.30	2.70	1.98%
A - Cafeteria	3,510.12	16.22	11.92%
A - Civic Small Parts	878.61	4.06	2.98%
A - Handwash Station	370.06	1.71	1.26%
A - Lobby Washroom	101.71	0.47	0.35%
A - MS	1,095.02	5.06	3.72%
A - Security	116.86	0.54	0.40%
B - ABPB	1,194.57	5.52	4.06%
B - ACFLI	1,084.20	5.01	3.68%
B - ACRK	508.56	2.35	1.73%
B - ACRM	385.20	1.78	1.31%
B - ACTA	1,690.14	7.81	5.74%
B - ACUA	549.67	2.54	1.87%
B - ASRK	2,813.29	13.00	9.56%
B - AVFL	1,153.45	5.33	3.92%
B - AVLA	722.80	3.34	2.46%
B - AVUP	1,034.43	4.78	3.51%
B - Civic Hoses	121.19	0.56	0.41%
B - Lower Arm	302.97	1.40	1.03%
Men's Locker & Washroom	389.53	1.80	1.32%
MS Washroom	103.88	0.48	0.35%
Unlabelled	1,590.59	7.35	5.40%





Women's Locker & Washroom	419.83	1.94	1.43%
A - ACRL	478.26	2.21	1.62%
B - ACCB	287.82	1.33	0.98%
Total	29,440.00	136.04	

Considering the large number of areas, the composition of each individual area's waste to energy recovery stream can be found in Appendix E. Please note that material categories that contributed less than 1.00% of a tenant/ area's total disposal of waste to landfill were not labelled in these figures.



4.3.2.2 Divertible Materials Found in the Waste to Energy Recovery

11,822.42 kg or 40.16% of the material found in the waste to energy recovery stream had the potential to be diverted through the currently recycling programs in place. The percentage of recyclable materials and compostable (organic) materials sent to energy recovery stream can be seen in Figure 23.

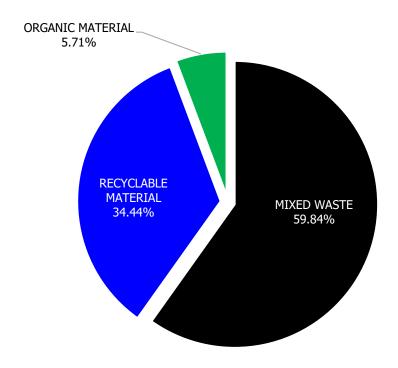


Figure 23. The composition of the waste to energy recovery stream, shown in percent.

Photographs of recyclable materials and compostable materials found in the waste to energy recovery stream during the waste audit can be found in Appendix C: Photo Log – Plant 2.



10,140.36 kg or 34.44% of the material found in the waste to energy recovery stream was recyclable. If disposed of correctly, this material could have been diverted through the recycling streams. Notably, LDPE (#4) is currently not being diverted due to absence in recycling market. A breakdown of the recyclable material found in the waste to energy recovery stream is shown in Figure 24.

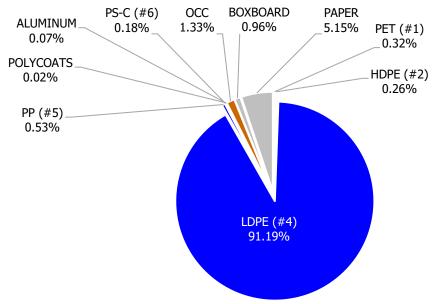


Figure 24. Recyclable materials found in the waste to energy recovery stream, shown in percent.

1,682.06 kg or 5.71% of the material found in the waste to energy recovery stream was compostable. This material could have been diverted through a composting stream if operating onsite. A breakdown of the organic material found in the waste to energy recovery stream is shown in Figure 25.



Figure 25. Organic materials found in the waste to energy recovery stream, shown in percent.



4.3.3 TOTAL WASTE DIVERTED FROM ENERGY RECOVERY

The total amount of waste diverted through recycling streams at Plant 2 between May 2022 and April 2023 was 223,480.00 kg. Figure 26 displays the total amount of waste diverted by material category.

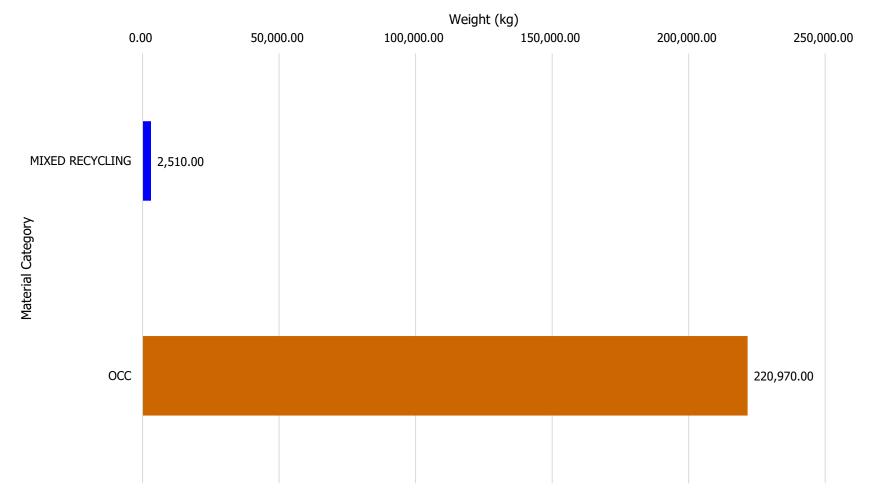


Figure 26. Waste diverted by material category, shown in kilograms.



4.3.4 CAPTURE RATES

Capture rate provides an indication of how well a site's diversion streams are operating. The overall capture rate at Plant 2 was 94.98% meaning that 94.98% of all the divertible materials generated on-site were correctly source separated and diverted from energy recovery stream. The remaining 5.01% of divertible materials were incorrectly source separated and sent to energy recovery, even though they could have been diverted through one of the diversion streams currently operating at the site. Figures 27 identifies the capture rates for each divertible material category of waste.

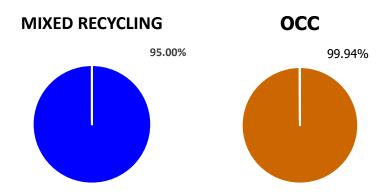
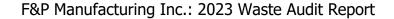


Figure 27. The capture rates for each divertible material category, shown in percent.





4.3.5 CONCLUSION

In total, 9,237.02 kg of LDPE 4 was sent to the energy recovery stream in Plant 2. This accounts for 31.38% of the total weight of materials sent to the energy recovery stream.

Further, 95.66% of recyclable material was correctly source separated in the recycling streams, with the remaining 4.34% being sent to energy recovery.

Within the audit sample, 7.77 kg of food waste was observed onsite, accounting for 5.71% of the total sample weight.

Please refer to section 5.0 Recommendations for a list of initiatives that could be implemented at 1 Nolan Road to improve the site's diversion from energy recovery performance.



5.0 RECOMMENDATIONS

5.1 THE 3 R's RECOMMENDATION: REDUCE, REUSE, RECYCLE

Waste Solutions recommends that F&P Manufacturing Inc. implement programs that align with the 3 R's: reduce, reuse, and recycle. Waste Solutions believes that the following programs would make a positive impact at your site.

5.1.1 REUSE: LAUNDRY SERVICE

Implement a laundry program for textile gloves worn by the employees at your site so that these materials can be repeatedly cleaned and reused. Currently the site annually disposes of **42,239.11 kg of textile gloves** and these materials could have been washed and reused. Additionally, a laundry program would likely result in cost savings, as new PPE would not have to be purchased as frequently.

Specifically, Plant 1 contributes to 99.40% of the textile gloves, with 41,983.75 kg being sent to the energy recovery facility. Plant 1's sites with the highest textile glove disposal can be seen below in Table 11.

Table 11. Highest Generation areas for textile gloves in Plant 1

GENERATION AREA	ANNUAL VALUE (KG)
A - CRV	4,382.41 kg
A - Lines G, H, K, L, M, W	9,865.22 kg
B - IWCFL, WCSR I & J	3,892.27 kg
B - Lines F, H, K, L, M, W	5,386.71 kg
Unlabeled	3,036.93 kg



5.1.2 REDUSE: PAPER TOWEL

Currently the site generates **26,595.90 kg** of paper towel, with Plant 1 contributing to 93.26% of the total paper towel generated, as shown in figure 28.

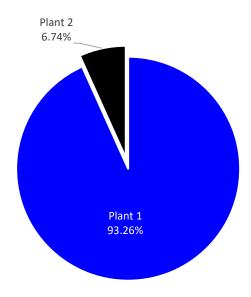


Figure 28. The total amount of paper towel generated per Plant.

Most of the paper towel in Plant 1 is being generated by the handwash station and washrooms at the site. Waste Solutions recommends that F&P Manufacturing encourages employees to reduce the use of paper towel. Additionally, F&P Manufacturing could consider replacing the washroom and handwash station paper towel dispensers and with automatic hand dryers. You can determine potential cost savings from switching from paper towel to hand dryers by reviewing your current purchasing records and conducting a cost benefit analysis.



5.2 OPTIMIZE DIVERSION STREAMS

5.2.1 OPTIMIZE THE RECYCLING PROGRAMS

Despite having recycling programs in place which accepts PET (#1), HDPE (#2), LDPE (#4), PP (#5), PS-C (#6), aluminum, steel, glass, polycoats, cardboard, boxboard, and paper, **10.74%** of the total waste sent to landfill was comprised of recyclable material. Table 12 below shows the breakdown of recyclable materials observed in the landfill by each area onsite.

Table 12. Recyclable materials in the waste to landfill stream.

RECYCLABLE MATERIAL	ANNUAL AMOUNT OF RECYCLABLE MATERIAL IN LANDFILL (KG)	PERCENTAGE OF TOTAL RECYCLABLES IN LANDFILL
PET (#1)	324.33	2.32%
HDPE (#2)	314.28	2.25%
LDPE (#4)	9,730.02	69.55%
PP (#5)	250.86	1.79%
PS-C (#6)	69.73	0.50%
ALUMINUM	152.91	1.09%
STEEL CANS	0.00	0.00%
GLASS	279.76	2.00%
POLYCOATS	74.46	0.53%
OCC	839.11	6.00%
BOXBOARD	644.29	4.61%
PAPER	1,310.47	9.37%
TOTAL	13,990.23	

It is recommended that F&P Manufacturing Inc. takes steps towards diverting this material through the recycling stream that is operating onsite. This can be done in the form of signage onsite, or employee education sessions. Waste Solutions can curate specific signage for the site, which will increase the employee understanding of the waste management practices onsite. Examples of waste signage:





Waste Solutions also has the knowledge, skills, and resources to develop and deliver an effective waste management training workshop for your employees. Waste Solutions can design an educational experience that is unique to F&P Manufacturing Inc. by integrating best practices with audit results, and by presenting the recommendations and options to the site stakeholders to give a better understanding of the best practices for the sites waste management.

Please contact Waste Solutions if you are interested in learning more about these additional services.



5.3 CONTINUOUS MONITORING

Waste Solutions recommends that F&P Manufacturing Inc. implement an action plan to regularly monitor the site's waste management practices and waste generation.

You can gain a better understanding of how waste is generated and managed at 1 Nolan Road if the site's waste management practices are regularly monitored.

5.3.1 SPOT AUDITS

Waste Solutions can provide support to the continuous monitoring of the waste generation and management at 1 Nolan Road by conducting on-site spot audits. A spot audit is smaller in scope than the annual waste audit Waste Solutions conducts at your site, but can provide you with similar information, including contamination rates and missed opportunities for diversion. Please contact Waste Solutions if you are interested in learning more about this additional service.

5.3.2 WASTE REDUCTION TEAM

Implement a Waste Reduction Team to monitor and address waste management issues at your building. The team should be comprised of members from a representative distribution of stakeholders at the site to ensure that all staff are aware of and participating in waste reduction and diversion initiatives. A team approach allows for work to be distributed among several employees and provides an opportunity for various departments and staff to bring their concerns and ideas to the table.

Continuous and regular monitoring can result in:



Opportunity to immediately address any issues or concerns that arise



Opportunity to monitor actions taken to make improvements at the site to determine if the implemented strategy is making a positive impact



A building community that is engaged, passionate about sustainability, and eager to participate in waste reduction and diversion efforts



APPENDIX A: ANNUAL DATA CALCULATIONS

Annual Data Calculations



Hauler Data

After bins are emptied, material collected is disposed of at local waste facilities, and this material is weighed and reported monthly by the haulers.

Waste Solutions sums a 12-month period of hauler weights to annualize the 24-hour sample of waste audited at the site.



Service Schedule

Annual weight of waste streams are calculated multiplying the following variables:

- Number of Bins
- Bin Size
- Waste Solutions Standardized Waste Estimate
- Pick-ups per Week
- # Weeks per Year
- Bin Fullness (%)



Operating Days

Annual weight of waste streams is calculated by multiplying the 24-hour sample of waste audited by the number of operating days onsite.

waste solutions



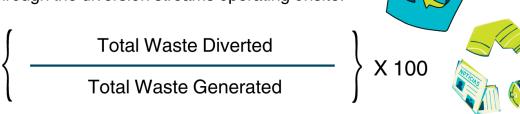
APPENDIX B: WASTE AUDIT CALCULATIONS

Waste Audit Calculations



Diversion Rate

The percentage of waste diverted from the landfill through the diversion streams operating onsite.



Capture Rate

Proportion of all waste diverted from the landfill to the total of all waste material that could have been diverted.





Contamination Rate

Proportion of all unacceptable materials found in diversion streams onsite.





APPENDIX C: PHOTO LOG - PLANT 1





Images 1-2. On-site methods to handle, collect, and store waste.



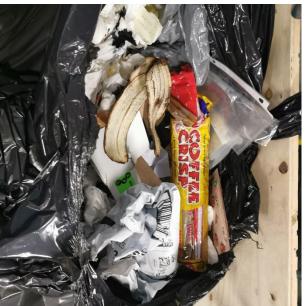






Images 3-5. The staged waste sample representing 24-hours of waste generation.





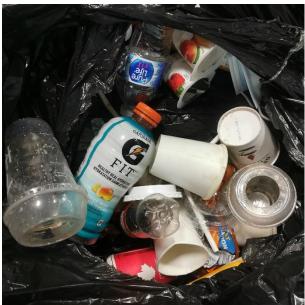






Images 6-9. Organic materials found in the waste to energy recovery stream that could have been diverted if the composting stream was operating.









Images 10-12. Recyclable materials found in the waste to energy recovery stream that could have been diverted through the recycling streams in place.











Images 13-16. Common landfill materials found in the waste to energy recovery stream.



APPENDIX D: PHOTO LOG – PLANT 2



Image 17. On-site methods to handle, collect, and store waste.



Image 18. The staged waste sample representing 24-hours of waste generation.





Images 19-22. Recyclable materials found in the waste to energy recovery stream that could have been diverted through the mixed recycling stream in place.







Images 23-24. Organic materials found in the waste to energy recovery stream that could have been diverted if the composting stream was operating.



APPENDIX E: WASTE SENT TO ENERGY RECOVERY BY AREA - PLANT 1

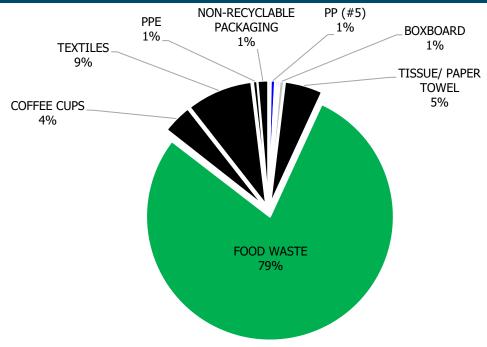


Figure 1. A – Cafeteria's waste to energy recovery, shown in percent.

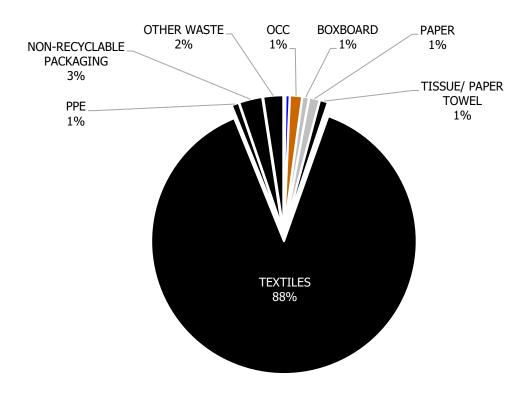


Figure 2. A – Civic's waste to energy recovery, shown in percent.



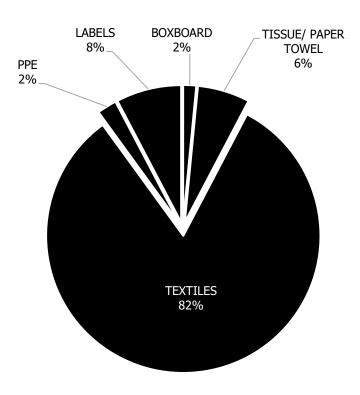


Figure 3. A - CRV's waste to energy recovery, shown in percent.

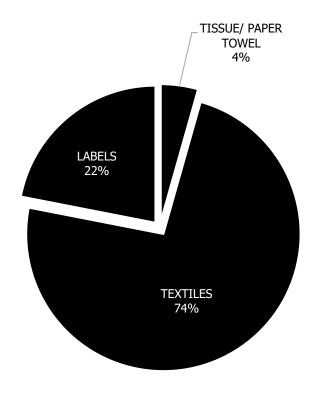


Figure 4. A - Hydro's waste to energy recovery, shown in percent.



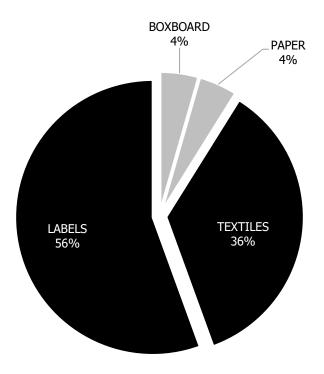


Figure 5. A - Line LWCFS 3725's waste to energy recovery, shown in percent.

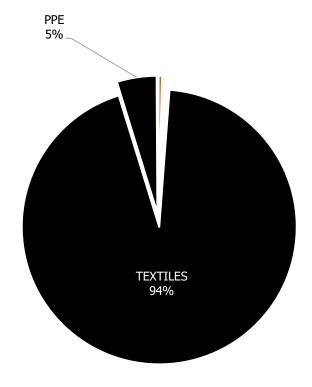


Figure 6. A - Lines G, H, K, L, M, W's waste to energy recovery, shown in percent.



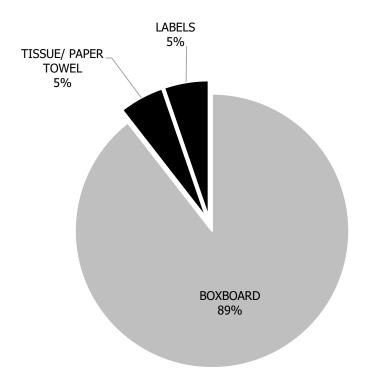


Figure 7. A - Paint Office's waste to energy recovery, shown in percent.

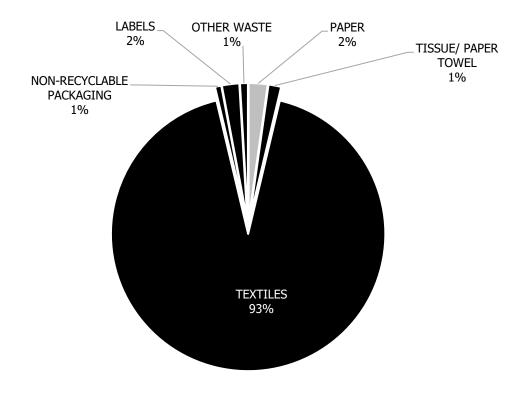


Figure 8. A - WCBV/WCVL & WMBC Line D's waste to energy recovery, shown in percent.



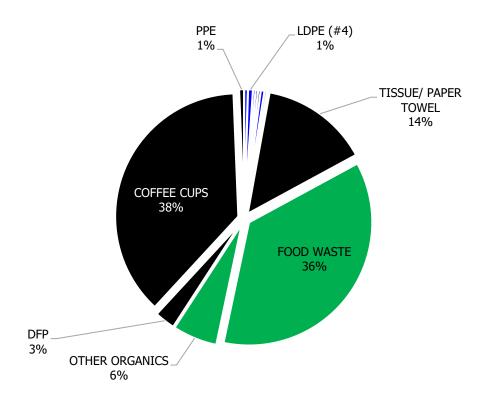


Figure 9. B - Cafeteria's waste to energy recovery, shown in percent.

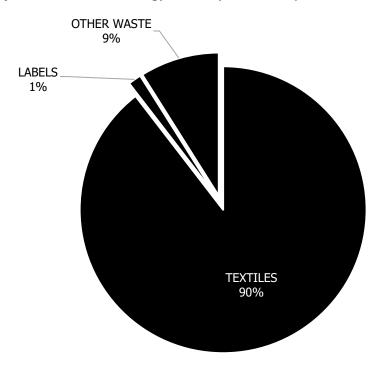


Figure 10. B - Civic Small Parts' waste to energy recovery, shown in percent.



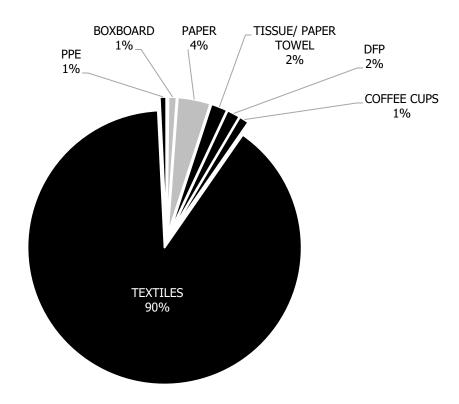


Figure 11. B - CRV/Civic Nut Welding's waste to energy recovery, shown in percent.

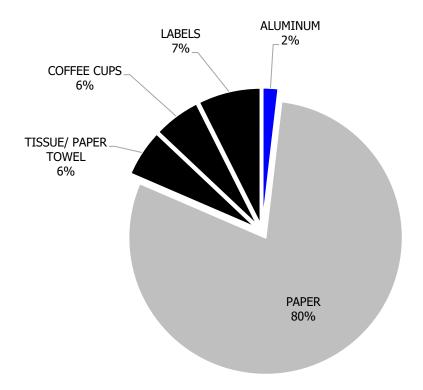


Figure 12. B - ISD Office's waste to energy recovery, shown in percent.



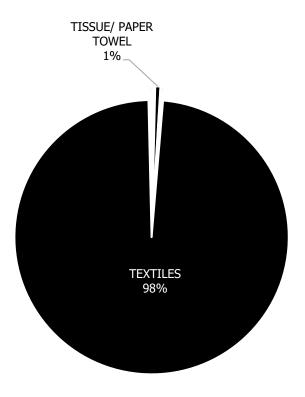


Figure 13. B - IWCFL, WCSR I & J's waste to energy recovery, shown in percent.

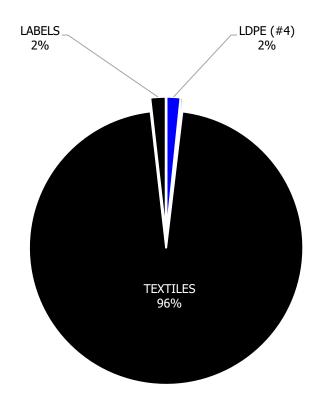


Figure 14. B - Lines F, H, K, L, M, W's waste to energy recovery, shown in percent.



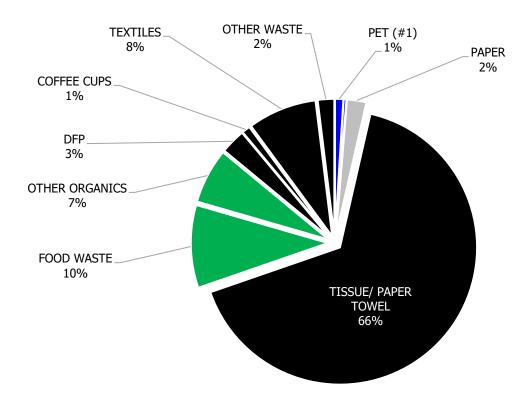


Figure 15. B - Production Office's waste to energy recovery, shown in percent.

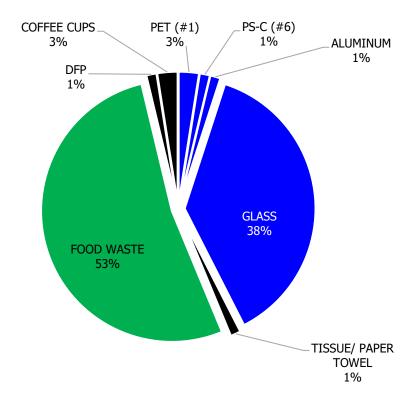


Figure 16. B - Purchasing Office & Boardroom's waste to energy recovery, shown in percent.



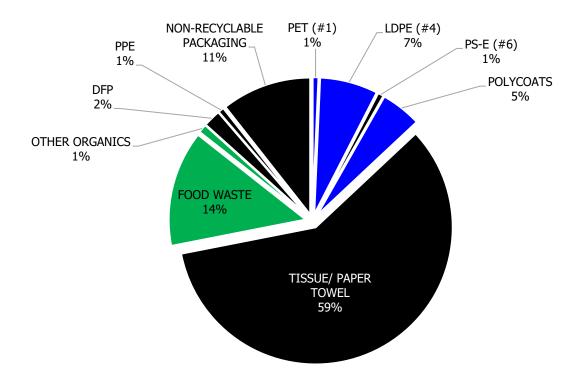


Figure 17. B - Quality Area & Storeroom's waste to energy recovery, shown in percent.

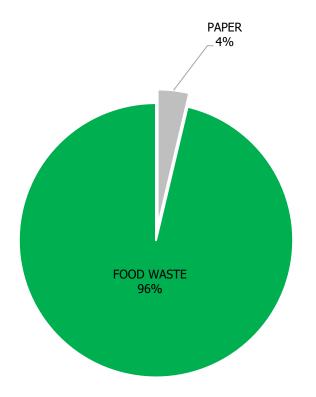


Figure 18. B - Stamping Office's waste to energy recovery, shown in percent.



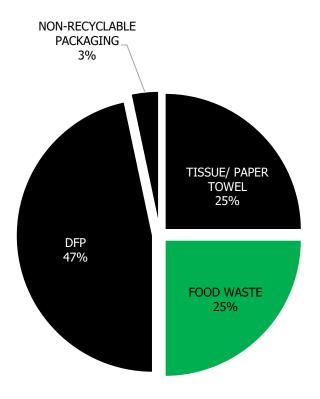


Figure 19. B - TIR/Accounting's waste to energy recovery, shown in percent.

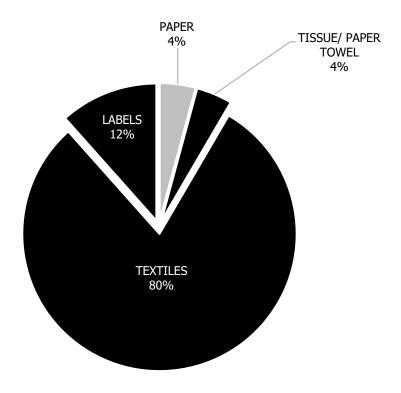


Figure 20. B - TYA & TZS's waste to energy recovery, shown in percent.



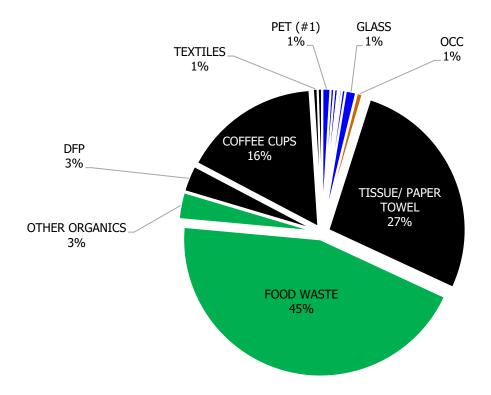


Figure 21. C - Cafeteria's waste to energy recovery, shown in percent.

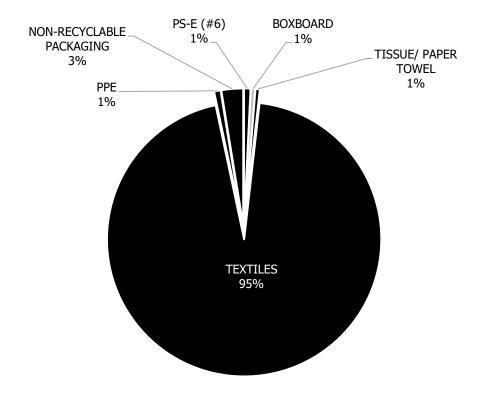


Figure 22. C - Civic's waste to energy recovery, shown in percent.



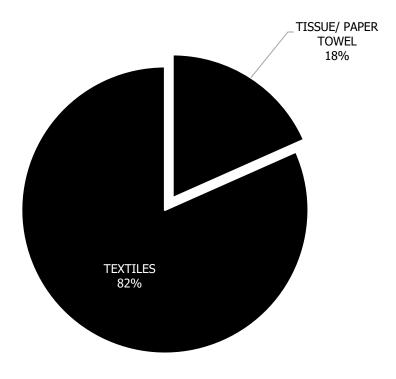


Figure 23. C - CRV's waste to energy recovery, shown in percent.



Figure 24. C - IWCFL's waste to energy recovery, shown in percent.



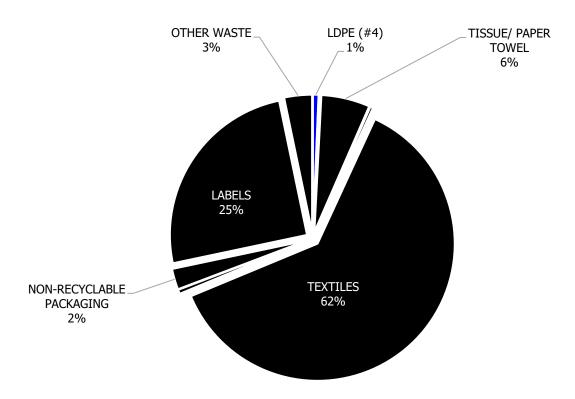


Figure 25. C - Line 2/3, SP Line & TYA/Line D's waste to energy recovery, shown in percent.

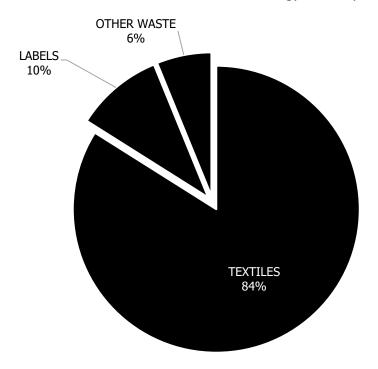


Figure 26. C - Nut Line's waste to energy recovery, shown in percent.



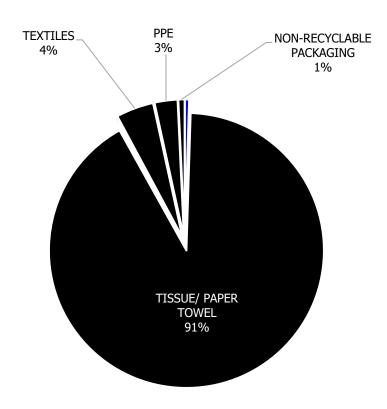


Figure 27. Café Washroom's waste to energy recovery, shown in percent.

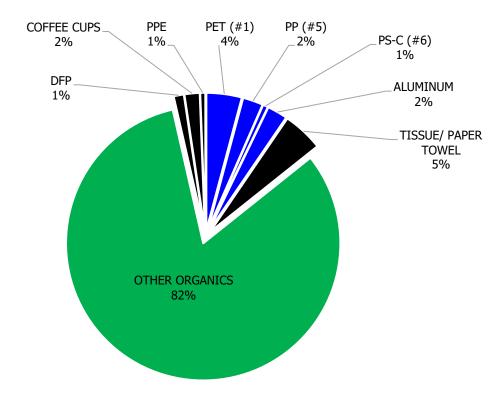


Figure 28. Front Entrance's waste to energy recovery, shown in percent.



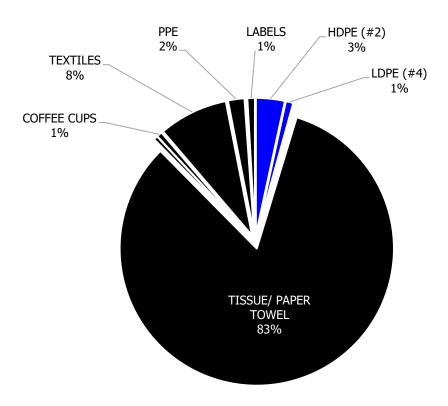


Figure 29. Handwash Station's waste to energy recovery, shown in percent.

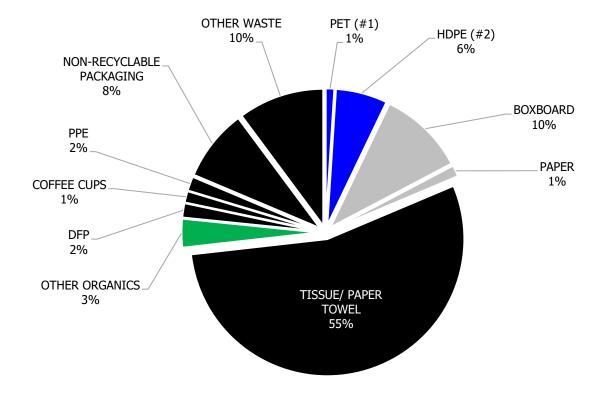


Figure 30. Lobby Security's waste to energy recovery, shown in percent.



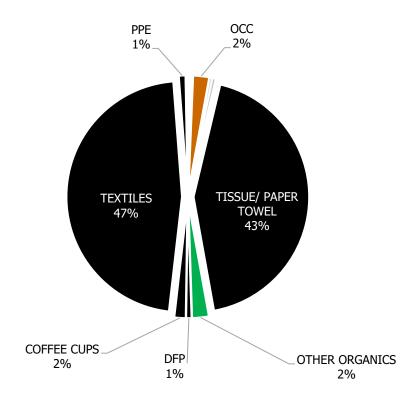


Figure 31. Men's Locker & Washroom's waste to energy recovery, shown in percent.

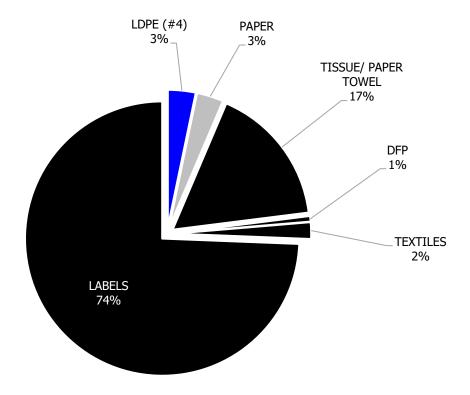


Figure 32. Paint Beam Line's waste to energy recovery, shown in percent.



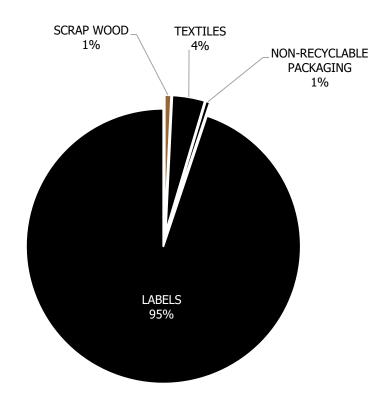


Figure 33. Paint Small Part's waste to energy recovery, shown in percent.

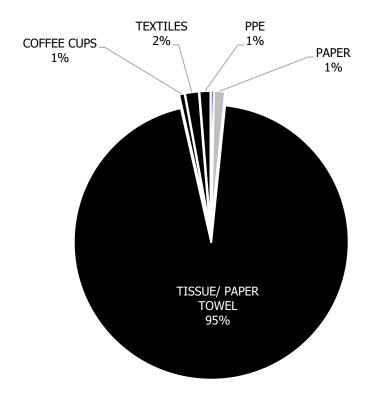


Figure 34. Paint Washroom's waste to energy recovery, shown in percent.



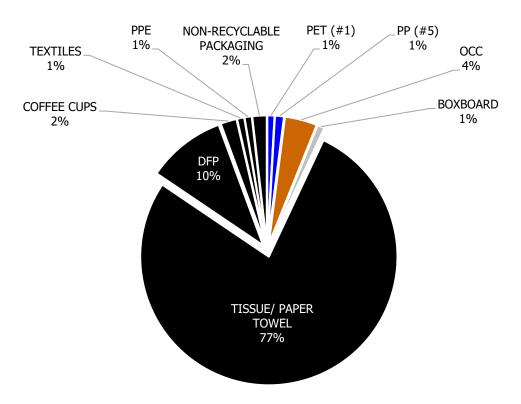


Figure 35. Satellite Cafeteria & Washroom's waste to energy recovery, shown in percent.

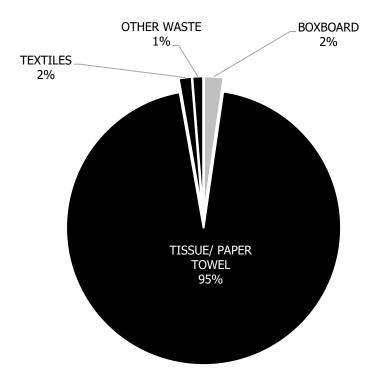


Figure 36. Unlabelled waste to energy recovery, shown in percent.



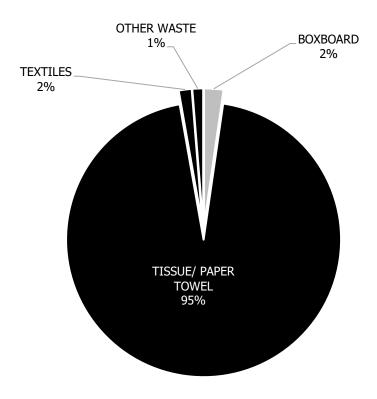


Figure 37. Unlabelled Washroom's waste to energy recovery, shown in percent.

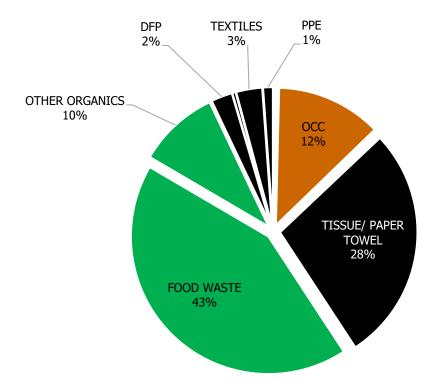


Figure 38. Women's Locker & Washroom's waste to energy recovery, shown in percent.



APPENDIX F: WASTE SENT TO ENERGY RECOVERY BY AREA - PLANT 2



Figure 1. A – ABPB's waste to energy recovery, shown in percent.

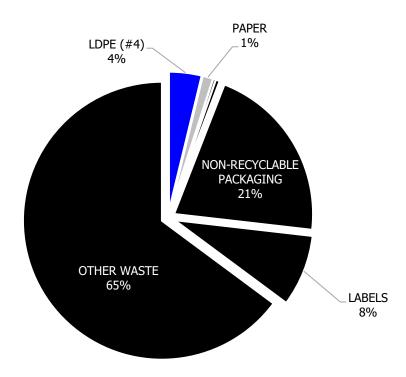


Figure 2. A - ACCB's waste to energy recovery, shown in percent.



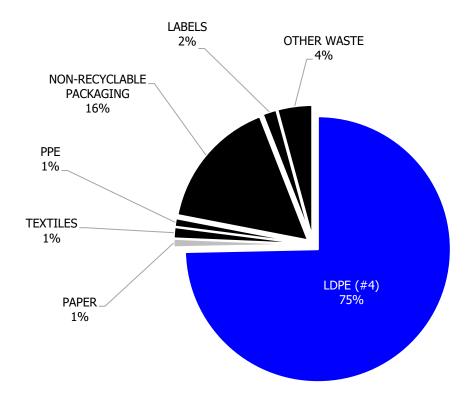


Figure 3. A - ACRK's waste to energy recovery, shown in percent.

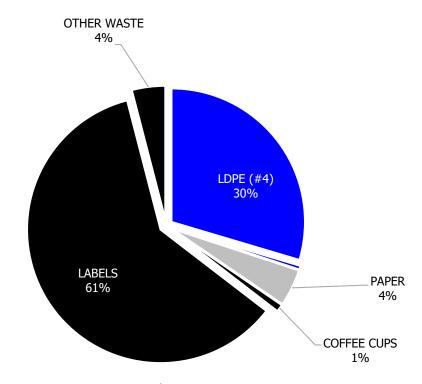


Figure 4. A - ACRM's waste to energy recovery, shown in percent.



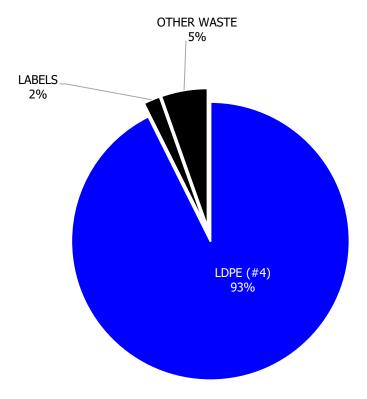


Figure 5. A - ACTA's waste to energy recovery, shown in percent.

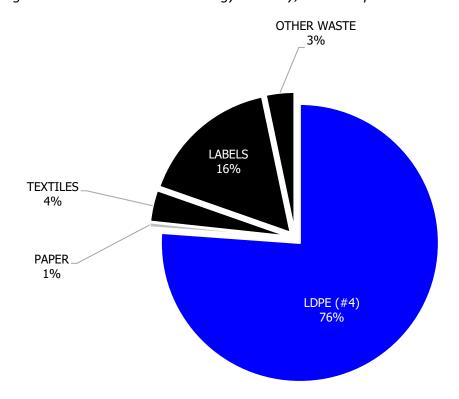


Figure 6. A - ASRK's waste to energy recovery, shown in percent.



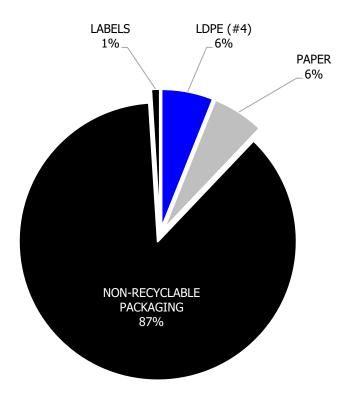


Figure 7. A - AVLA's waste to energy recovery, shown in percent.

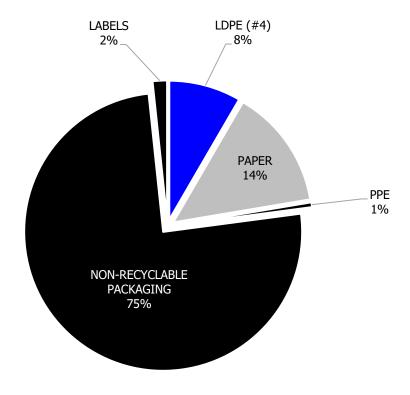


Figure 8. A - AVUP's waste to energy recovery, shown in percent.



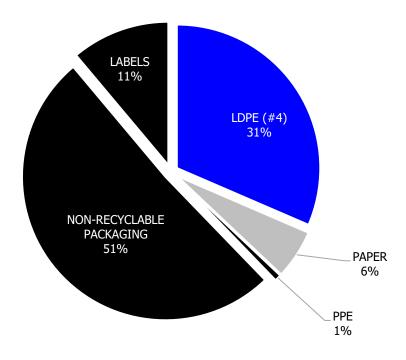


Figure 9. A - AVVP's waste to energy recovery, shown in percent.

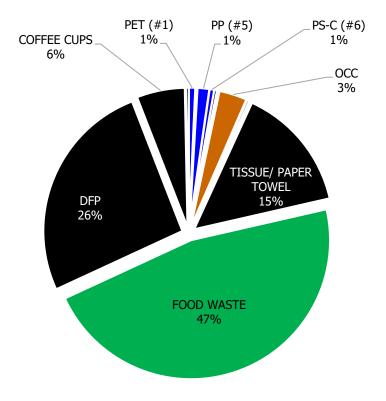


Figure 10. A - Cafeteria's waste to energy recovery, shown in percent.



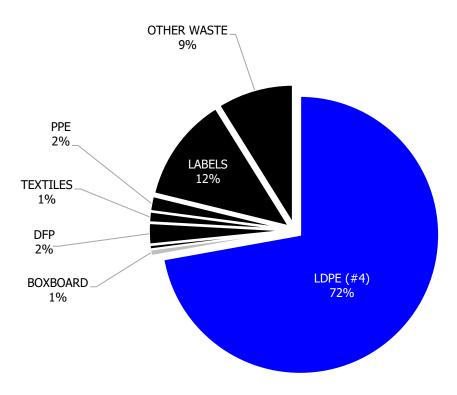


Figure 11. A - Civic Small Parts' waste to energy recovery, shown in percent.

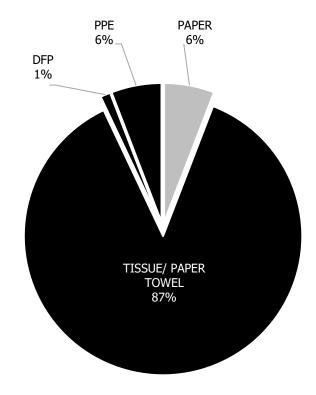


Figure 12. A - Handwash Station's waste to energy recovery, shown in percent.



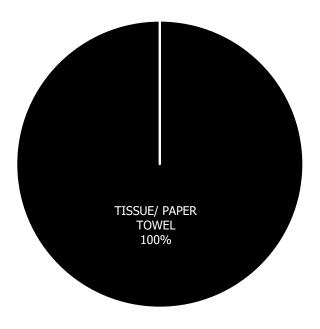


Figure 13. A - Lobby Washroom's waste to energy recovery, shown in percent.

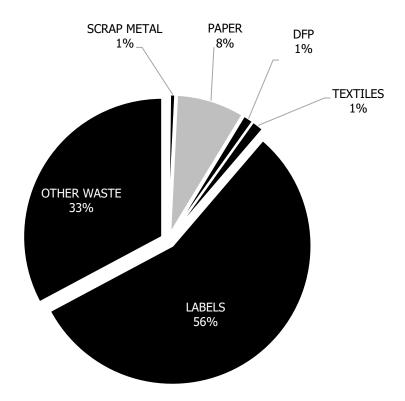


Figure 14. A – MS' waste to energy recovery, shown in percent.



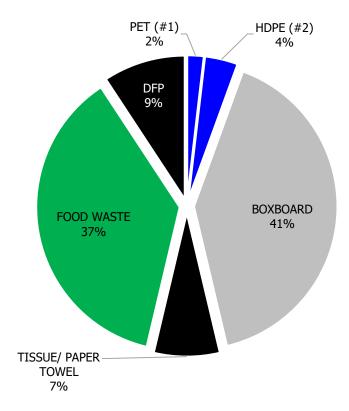


Figure 15. A - Security 's waste to energy recovery, shown in percent.

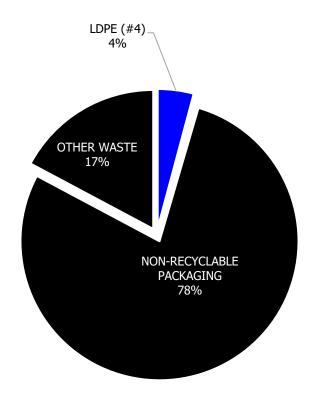


Figure 16. B - ABPB's waste to energy recovery, shown in percent.



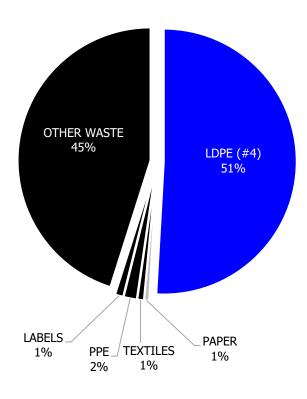


Figure 17. B - ACFLI's waste to energy recovery, shown in percent.

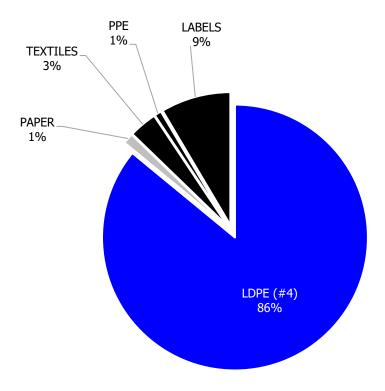


Figure 18. B - ACRK's waste to energy recovery, shown in percent.



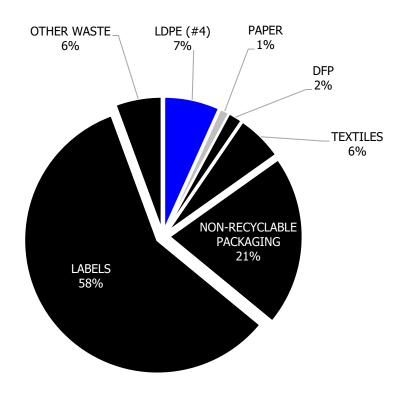


Figure 19. B – ACRM's waste to energy recovery, shown in percent.

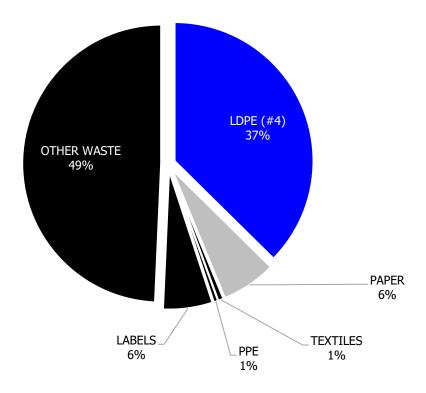


Figure 20. B – ACTA's waste to energy recovery, shown in percent.



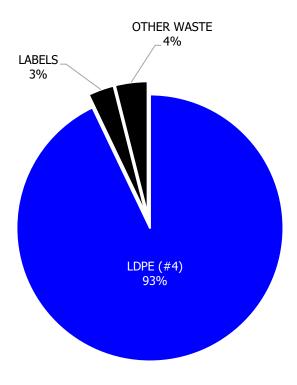


Figure 21. B - ACUA's waste to energy recovery, shown in percent.

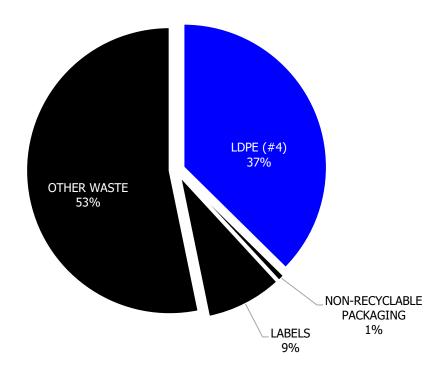


Figure 22. B – ASRK's waste to energy recovery, shown in percent.



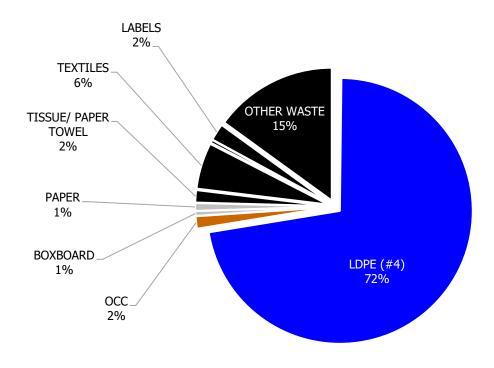


Figure 23. B - AVFL's waste to energy recovery, shown in percent.

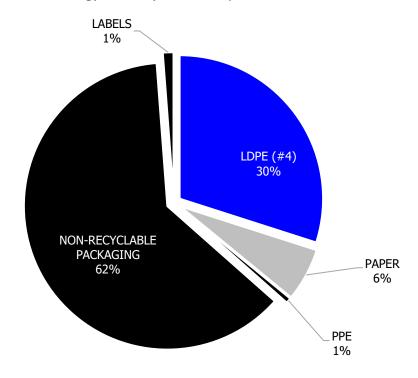


Figure 24. B - AVLA's waste to energy recovery, shown in percent.



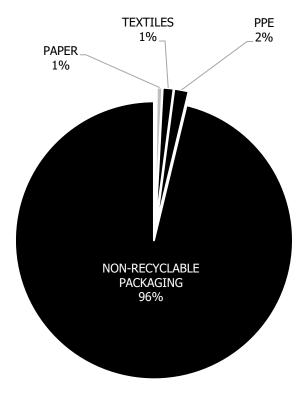


Figure 25. B – AVUP's waste to energy recovery, shown in percent.

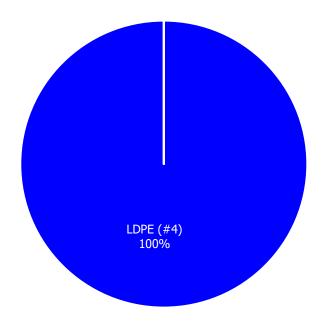


Figure 26. B - Civic Hoses' waste to energy recovery, shown in percent.



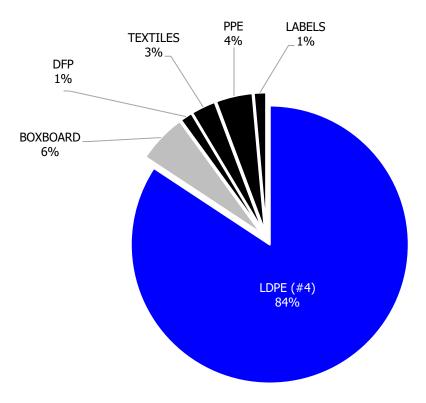


Figure 27. B - Lower Arm's waste to energy recovery, shown in percent.

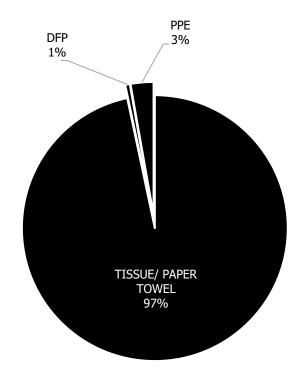


Figure 28. Men's Locker & Washroom's waste to energy recovery, shown in percent.



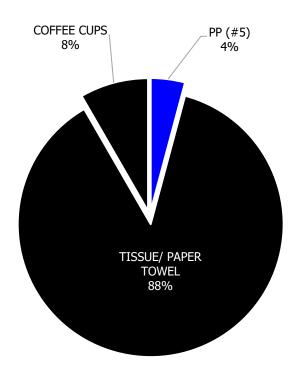


Figure 29. MS Washroom's waste to energy recovery, shown in percent.

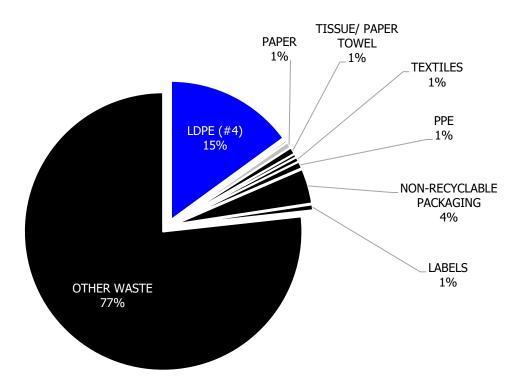


Figure 30. Unlabelled waste to energy recovery, shown in percent.



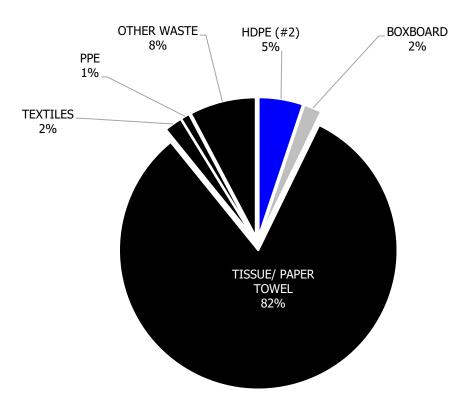


Figure 31. Women's Locker & Washroom's waste to energy recovery, shown in percent.

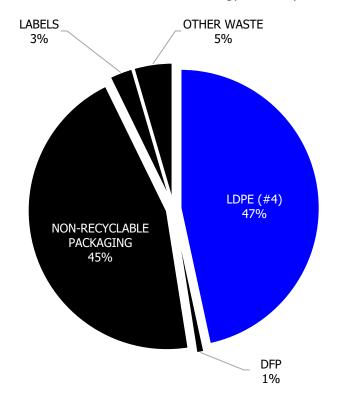


Figure 32. A – ACRL's waste to energy recovery, shown in percent.



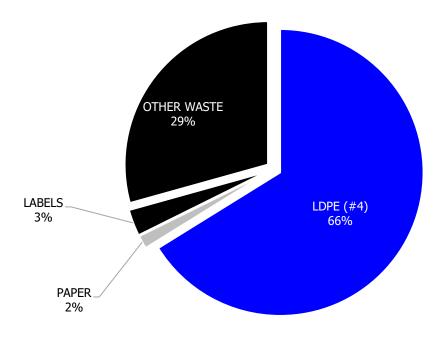


Figure 33. B – ACCB's waste to energy recovery, shown in percent.



APPENDIX F: REPORT OF A WASTE AUDIT FORM

Ministry of the Environment, Conservation and Parks
Report of a Waste Audit
Industrial, Commercial and Institutional Establishments
As required by Ontario Regulation 102/94

I. General Information

Name of Owner and/or Operator of Entity(ies) and Company Name:							
	1 Nolan Road. care of F&P Manufacturing Inc						
Name of Contact Person:	Telephone Number:	Email Address:					
Terry Diemert	(905) 936-3435 Ext. 459	terry.diemert@fandpmfg.com					
Street Address of Entity(ies):	:						
	1 Nolan Road						
Municipality:							
	Tottenham, Onta	nrio					
Type of Entity:							
	Manufacturing Establishments						

II. Description of Entity

Provide a brief overview of the entity(ies):

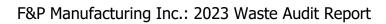
F&P Manufacturing Inc. is a subsidiary of Ftech Inc. in Japan, and it is a leading Tier 1 Automotive Parts Manufacturer located in Tottenham, Ontario. The site covers an area of 441,000 ft² and produces annually over 58 million automotive component parts.

III. How Waste is Produced and Decisions Affecting the Production of Waste

Categories of Waste:	How is the Waste Produced and What Management Decisions/Policies Affect Its Production?
Polyethylene Terephthalate (PET #1)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
High-Density Polyethylene (HDPE #2)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
Low-Density Polyethylene (LDPE #4)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.



	Masta is separated when metavials are brought to the site by
Polypropylene (PP #5)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
Condensed Polystyrene (PS-C #6)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
Expanded Polystyrene (PS-E #6)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
Other Plastic (#7)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
Aluminum Food and Beverage Cans	Waste is generated when materials are brought to the site by employees; and when materials are purchased for daily operations.
Steel Food and Beverage Cans	Waste is generated when materials are brought to the site by employees; and when materials are purchased for daily operations.
Glass Bottles & Jars for Food & Beverage	Waste is generated when materials are brought to the site by employees; and when materials are purchased for daily operations.
Polycoat Containers	Waste is generated when materials are brought to the site by employees; and when materials are purchased for daily operations.
Scrap Metal	Waste is generated through the manufacturing process.
Cardboard (Corrugated)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
Boxboard	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of these materials.
Mixed Paper (Fine Paper & Newsprint)	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
Tissues & Paper Towel	Waste is generated when materials are brought to the site by employees and when materials are purchased for daily operations.
Solid Food Waste	Waste is generated when materials are brought to the site by employees.
Other Organic Materials	Waste is generated when materials are brought to the site by employees and when materials are purchased for daily operations.
Scrap Wood	Waste is generated when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.





Sludge	Waste is generated through the production process.
Disposable Food Packaging	Waste is generated when solid food waste is brought to the site by employees, and when materials are purchased by staff for consumption.
Coffee Cups	Waste is generated when coffee is brought to the site by employees, and when materials are purchased by staff for coffee consumption.
Textile Gloves	Waste is generated when materials are purchased for daily operations.
Personal Protective Equipment	Waste is generated when materials are purchased for daily operations.
Packaging	Waste is generated when materials are purchased for daily operations; and from the packaging associated with the purchasing of these materials.
Non-Recyclable Packaging	Waste is generated when materials are purchased for daily operations; and from the packaging associated with the purchasing of these materials.
Labels and Label Backing	Waste is generated when materials are purchased for daily operations; and from the packaging associated with the purchasing of these materials.
Other Waste	Waste is generated when materials are brought to the site by employees; when materials are purchased for daily operations; and from the packaging associated with the purchasing of materials.
Sludge	Waste is generated through the production process.

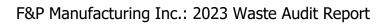


IV. Management of Waste

Category:	Waste to be Disposed:	Reused or Recycled Waste:
	Material is occasionally	
	disposed of as waste by	Employees place this material
Polyethylene Terephthalate (PET #1)	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	,
	Material is occasionally	
	disposed of as waste by	Employees place this material
High-Density Polyethylene (HDPE #2)	employees due to non-	in the recycling bins to be
riight behistey to tyethylene (tibl 2 ii2)	compliance with the current	recycled.
	recycling program.	recycled.
	This material is handled as	
Low-Density Polyethylene (LDPE #4)	mixed waste and is placed in a	Not applicable
Low-Delisity Polyethylene (LDFL #4)	<u> </u>	Not applicable.
	bin for disposal.	
	Material is occasionally	Employees place this meet and a
Delument des = (DD #5)	disposed of as waste by	Employees place this material
Polypropylene (PP #5)	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	
	Material is occasionally	
	disposed of as waste by	Employees place this material
Condensed Polystyrene (PS-C #6)	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	
	This material is handled as	
Expanded Polystyrene (PS-E #6)	mixed waste and is placed in a	Not applicable.
	bin for disposal.	
	This material is handled as	
Other Plastic (#7)	mixed waste and is placed in a	Not applicable.
	bin for disposal.	
	Material is occasionally	
	disposed of as waste by	Employees place this material
Aluminum Food and Beverage Cans	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	
	Material is occasionally	
	disposed of as waste by	Employees place this material
Steel Food and Beverage Cans	employees due to non-	in the recycling bins to be
Steel 1 300 and Develuge Cans	compliance with the current	recycled.
	recycling program.	recycled.
	Material is occasionally	
	1	Employees place this metarial
Class Pottles & Jars for Food & Powers	disposed of as waste by	Employees place this material
Glass Bottles & Jars for Food & Beverage	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	
	Material is occasionally	
	disposed of as waste by	Employees place this material
Polycoat Containers	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	



	Material is occasionally	
	disposed of as waste by	Employees place this material
Scrap Metal	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	
	Material is occasionally	
	disposed of as waste by	Employees place this material
Glass Bottles & Jars for Food & Beverage	employees due to non-	in the recycling bins to be
_	compliance with the current	recycled.
	recycling program.	,
	Material is occasionally	
	disposed of as waste by	Employees place this material
Cardboard (Corrugated)	employees due to non-	in the recycling bins to be
caraboara (corragatea)	compliance with the current	recycled.
	recycling program.	recycled.
	Material is occasionally	
	•	Employees place this material
Daybaard	disposed of as waste by	Employees place this material
Boxboard	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	
	Material is occasionally	
	disposed of as waste by	Employees place this material
Mixed Paper (Fine Paper & Newsprint)	employees due to non-	in the recycling bins to be
	compliance with the current	recycled.
	recycling program.	
	This material is handled as	
Tissues & Paper Towel	mixed waste and is placed in a	Not applicable.
	bin for disposal.	
	Currently, due to Covid-19	
	pandemic, the organics	Once the program resumes,
Solid Food Waste	program has been put on	employees will be able to
Solia roda Waste	hold, and therefore, solid food	place this material in the bins
	waste is being handled as	to be composted.
	mixed waste.	
	This material is handled as	
Other Organic Materials	mixed waste and it is disposed	Not applicable.
5	of in the landfill.	, ,,
	Material is occasionally	
	disposed of as waste by	Employees place this material
Scrap Wood	employees due to non-	in the recycling bins to be
Scrap Wood	compliance with the current	recycled.
	recycling program.	recycleu.
	This material is handled as	
Cludas		Not applicable
Sludge	mixed waste and it is disposed	Not applicable.
	of in the landfill.	
S. 11 5 15 1	This material is handled as	
Disposable Food Packaging	mixed waste and is placed in a	Not applicable.
	bin for disposal.	
	This material is handled as	
Coffee Cups	mixed waste and is placed in a	Not applicable.
	bin for disposal.	





Textile Gloves	This material is handled as mixed waste and is placed in a bin for disposal.	Not applicable.
Personal Protective Equipment	This material is handled as mixed waste and is placed in a bin for disposal.	Not applicable.
Non-Recyclable Packaging	This material is handled as mixed waste and is placed in a bin for disposal.	Not applicable.
Labels and Label Backing	This material is handled as mixed waste and is placed in a bin for disposal.	Not applicable.
Other Waste	This material is handled as mixed waste and is placed in a bin for disposal.	Not applicable.



Part V					Estimated	Amount o	f Waste Produce	d in Kilograms (kg	;)			
Part v	Generated				Reused			Recycled			Disposed	
Waste Categories:	"A" Base Year	"B" Current Year	"C" Change (B-A)	"A" Base Year	"B" Current Year	"C" Change (B-A)	"A" Base Year	"B" Current Year	"C" Change (B-A)	"A" Base Year	"B" Current Year	"C" Change (B-A)
Polyethylene Terephthalate (PET #1)		324.33						0.00			324.33	
High-Density Polyethylene (HDPE #2)		314.28						0.00			314.28	
Low-Density Polyethylene (LDPE #4)		9,730.02						0.00			9,730.02	
Polypropylene (PP #5)		250.86						0.00			250.86	
Condensed Polystyrene (PS-C #6)		69.73						0.00			69.73	
Expanded Polystyrene (PS-E #6)		29.05						0.00			29.05	
Other Plastic (#7)		99.21						0.00			99.21	
Aluminum Food and Beverage Cans		152.91						0.00			152.91	
Steel Food and Beverage Cans		0.00						0.00			0.00	
Glass Bottles & Jars for Food & Beverage		279.76						0.00			279.76	
Polycoats		74.46						0.00			74.46	
Mixed Recycling		14,330.00						14,330.00			0.00	
Scrap Metal		24,354,883.88						24,354,877.39			6.49	
Cardboard (Corrugated)		272,039.11						271,200.00			839.11	
Boxboard		644.29						0.00			644.29	
Mixed Paper (Fine Paper & Newsprint)		1,310.47						0.00			1,310.47	



Doub 1/					Estimated	Amount o	of Waste Produce	d in Kilograms (kខ្	g)			
Part V		Generated			Reused		Recycled			Disposed		
Waste Categories:	"A" Base Year	"B" Current Year	"C" Change (B-A)	"A" Base Year	"B" Current Year	"C" Change (B-A)	"A" Base Year	"B" Current Year	"C" Change (B-A)	"A" Base Year	"B" Current Year	"C" Change (B-A)
Tissues & Paper Towel		26,595.90						0.00			26,595.90	
Solid Food Waste		15,474.64						0.00			15,474.64	
Other Organic Materials		1,853.22						0.00			1,853.22	
Scrap Wood		13,448.74						13,430.00			18.74	
Sludge		28,620.00						0.00			0.00	
Disposable Food Packaging		2,201.94						0.00			2,201.94	
Coffee Cups		4,679.39						0.00			4,679.39	
Clothing and Textiles		42,239.11						0.00			42,239.11	
Personal Protective Equipment		1,258.17						0.00			1,258.17	
Non-Recyclable Packaging		5,510.01						0.00			5,510.01	
Labels and Label Backing		8,741.27						0.00			8,741.27	
Other Waste		7,792.63						0.00			7,792.63	
Total:	22,463,512.07	24,812,947.39	2,349,435.31	0.00	0.00	0.00	22,334,329.00	24,653,837.39	2,319,508.39	129,183.07	130,490.00	-1,306.93
Percent Change (total C/total A x 100)			-10.46%						-10.39%			-1.01%

¹Please note that plastics (PET #1, HDPE #2, PP #5, PS-C #6), aluminum, steel, gable top, Tetra Pak containers, paper and boxboard do not have recycled weights because the currently program is mixed recycling, which means, paper and plastics are collected together. The data was provided by the hauler and total recycled weights were recorded as "Mixed Recycling Materials".

Please note that the values reported as base year correspond to the values retrieved from the 2021 waste audit report.



VI. Extent to which Materials or Products used or sold by the Entity Consist of Recycled or Reused Materials or Products.

	Do you have a management policy in place that promotes the purchasing and/or use of materials or products that consist of recycled and/or reused materials or products? If yes, please describe.
1.	Yes. As part of its ISO 14001 certification, F&P Manufacturing Inc. has developed an environmental management system and the Green Purchasing Guideline.
	Do you have plans to increase the extent to which materials or products used or sold* consist of recycled or reused materials or products? If yes, please describe.
2.	Yes. F&P Manufacturing plans to develop initiatives to increase the use of recycled materials as well as to reuse materials, such as gloves through a washing program. Please contact F&P Manufacturing Inc. for more details.

^{*}Information regarding materials or products "sold" that consist of recycled or reused materials or products is only required from owners of retail shopping establishments and the owner(s) or operator(s) of large manufacturing establishments.

I hereby certify that the information provided in this Report of a Waste Audit is complete and correct.						
Signature of Authorized Official: Title: Date:						
Jim Walcolm	EHS Manager	July 21, 2023				



APPENDIX G: REPORT OF A WASTE REDUCTION WORK PLAN

Ministry of the Environment, Conservation and Parks Report of a Waste Reduction Work Plan Industrial, Commercial and Institutional Establishments As required by Ontario Regulation 102/94

I. General Information

Name of Owner and/or Open	rator of Entit	y(ies) and Company	Name:		
	1 Nolan	Road. care of F&P M	anufacturing Inc		
Name of Contact Person:	Telephor	e Number:	Email Address:		
Terry Diemert	(905)	936-3435 Ext. 459	terry.diemert@fandpmf	g.com	
Street Address of Entity(ies):	1				
		1 Nolan Road			
Municipality:					
		Tottenham, Ont	rio		
Type of Entity:					
Retail Shopping Establishmer	nt	Hote	and Motel		
Retail Shopping Complex Hospital					
Office Building	Office Building Educational Institution				
Restaurant Large Manufacturing Establishment X					

II. Description of Entity

Provide a brief overview of the entity(ies):

F&P Manufacturing Inc. is a subsidiary of Ftech Inc. in Japan, and it is a leading Tier 1 Automotive Parts Manufacturer located in Tottenham, Ontario. The site covers an area of 441,000 ft² and produces annually over 58 million automotive component parts.

III. Plans to Reduce, Reuse and Recycle Waste

For each category of waste described in Part V of "Report of a Waste Audit" (on which this plan is based), explain what your plans are to reduce, reuse, and recycle the waste, including: 1) how the waste will be source separated at the establishment, and 2) the programs to reduce, reuse, and recycle all source separated waste.

Waste Category	Source Separation and 3R's Program	
	Reduce: No plans	
	Reuse: No plans	
Debuggles - Tempoleholete (DET 114)	Recycle: Mixed recycling stream	
Polyethylene Terephthalate (PET #1)	Employees will be encouraged to use recycling bins to source	
	separate PET (#1). Bins have been provided in offices and staff	
	areas for employees.	
11:10 :: 01 :: (1005: #2)	Reduce: No plans	
High-Density Polyethylene (HDPE #2)	Reuse: No plans	



	T_ 1 1		
	Recycle: Mixed recycling stream		
	Employees will be encouraged to use recycling bins to source separate HDPE (#2). Bins have been provided in offices and staff		
	· · · · · · · · · · · · · · · · · · ·		
	areas for employees.		
	Reduce: No plans		
Low-Density Polyethylene (LDPE #4)	Reuse: No plans		
Low Bensity Foryethylene (LBT E 114)	Recycle: F&P Manufacturing will consider searching for a		
	market to recycle LDPE #4.		
	Reduce: No plans		
	Reuse: No plans		
Dolymranylana (DD #F)	Recycle: Mixed recycling stream		
Polypropylene (PP #5)	Employees will be encouraged to use recycling bins to source		
	separate PP (#5). Bins have been provided in offices and staff		
	areas for employees.		
	Reduce: No plans		
	Reuse: No plans		
	Recycle: Mixed recycling stream		
Condensed Polystyrene (PS-C #6)	Employees will be encouraged to use recycling bins to source		
	separate PS-C (#6). Bins have been provided in offices and staff		
	areas for employees.		
Expanded Polystyrene (PS-E #6)	No plans to reduce, reuse, or recycle PS-E (#6).		
Other Plastic (P #7)			
Other Plastic (P #7)	No plans to reduce, reuse, or recycle P (#7).		
	Reduce: No plans		
	Reuse: No plans		
Aluminum Food and Beverage Cans	Recycle: Mixed recycling stream		
	Employees will be encouraged to use recycling bins to source		
	separate aluminum. Bins have been provided in offices and staff		
	areas for employees.		
	Reduce: No plans		
	Reuse: No plans		
Steel Food and Beverage Cans	Recycle: Mixed recycling stream		
Steer rood and beverage cans	Employees will be encouraged to use recycling bins to source		
	separate steel. Bins have been provided in offices and staff		
	areas for employees.		
	Reduce: No plans		
	Reuse: No plans		
Class Battles & Java for Food & Borrage	Recycle: Mixed recycling stream		
Glass Bottles & Jars for Food & Beverage	Employees will be encouraged to use recycling bins to source		
	separate glass. Bins have been provided in offices and staff		
	areas for employees.		
	Reduce: No plans		
	Reuse: No plans		
Polycoats	Recycle: Mixed recycling stream		
	Employees will be encouraged to use recycling bins to source		
	separate polycoat containers. Bins have been provided in		
	offices and staff areas for employees.		
	Reduce: No plans		
	·		
Scrap Motal	Reuse: No plans		
Scrap Metal	Recycle: Scrap metal recycling stream		
	Employees will be encouraged to use recycling bins to source		
Courtly 1/C	separate scrap metal.		
Cardboard (Corrugated)	Reduce: No plans		



	Reuse: No plans		
	Recycle: Cardboard recycling stream Employees will be encouraged to use recycling bins to source separate cardboard. Bins have been provided in staff areas for		
	separate cardboard. Bins have been provided in staff areas for		
	employees.		
	Reduce: No plans		
	Reuse: No plans		
Boxboard	Recycle: Mixed recycling stream		
Boxboard	Employees will be encouraged to use recycling bins to source		
	separate boxboard. Bins have been provided in offices and staff		
	areas for employees.		
	Reduce: No plans		
	Reuse: No plans		
Mixed Daner (Fine Daner & Newsprint)	Recycle: Mixed recycling stream		
Mixed Paper (Fine Paper & Newsprint)	Employees will be encouraged to use recycling bins to source		
	separate paper. Bins have been provided in offices and staff		
	areas for employees.		
	Reduce: F&P Manufacturing will consider implementing a paper		
	towel reduction program to reduce the amount of paper towel		
Tissues & Paper Towel	being sent to the energy recovery facility.		
	Reuse: No plans		
	Recycle: No plans.		
Solid Food Waste	No plans to reduce, reuse, or recycle other solid food waste.		
Other Organic Materials	No plans to reduce, reuse, or recycle other organic materials.		
	Reduce: No plans		
	Reuse: No plans		
Carra Mara d	Recycle: Wood recycling stream		
Scrap Wood	Employees will be encouraged to use recycling bins to source		
	separate scrap wood. Bins have been provided in staff areas for		
	employees.		
Sludge	No plans to reduce, reuse, or recycle sludge.		
Disposable Food Packaging	No plans to reduce, reuse, or recycle disposable food packaging.		
Coffee Cups	No plans to reduce, reuse, or recycle coffee cups.		
	Reduce & Reuse: F&P Manufacturing will consider		
T 111 Cl	implementing a glove wash program to reduce the amount of		
Textile Gloves	textile gloves currently being sent to an energy recovery facility.		
	Recycle: No plans		
Democrat Ducto III 5 1	No plans to reduce, reuse, or recycle personal protective		
Personal Protective Equipment	equipment		
Non-Recyclable Packaging	No plans to reduce, reuse, or recycle non-recyclable packaging.		
Labels and Label Backing	No plans to reduce, reuse, or recycle labels and label backing.		
Other Waste	No plans to reduce, reuse, or recycle other waste.		



IV. Responsibility for Implementing the Waste Reduction Work Plan

Identify who is responsible for implementing the Waste Reduction Work Plan at your entity(ies). If more than one person is responsible for implementation, identify each person who is responsible and indicate the part of the Waste Reduction Work Plan that each person is responsible for implementing.

Name of Person:	Responsibility:	Telephone Number:
Terry Diemert	3R Programs	(905) 936-3435 Ext. 459

V. Timetable for Implementing Waste Reduction Work Plan

Provide a timetable indicating when each source separation and 3Rs program of the Waste Reduction Work			
Plan will be implemented.			
Source Separation and 3Rs Program: Schedule for Completion:			
Paper Towel – Consider reducing the			
amount of paper towel by			
implementing hand dryers and			
encouraging staff to reduce the use of	2024 – Provide education and training to staff to increase efficiency		
paper towels.	of recycling programs. Consider implementing waste reduction		
	methods.		
Textile Gloves - Consider reducing the			
amount of textile gloves by			
implementing a washing program.			

VI. Communication to Staff, Customers, Guests, and Visitors

Explain how the Waste Reduction Work Plan will be communicated to employees, customers, tenants, guests/visitors and students:

The waste reduction work plan will be posted for staff to review. Staff will be briefed on new changes to diversion programs.



VII. Estimated Waste Produced by Material Type and the Projected Amount

Material Categories (as stated in Part III) Estimated Annual Waste Produced* (kgs)	Annual Waste	Name of Proposed 3Rs Program (as stated in Part III)	Projections to Reduce, Reuse or Recycle Waste (kgs)		Estimated Annual Amount to be	
	stated in Part III)	Reduce	Reuse	Recycle	Diverted** (%)	
Polyethylene Terephthalate (PET #1)	324.33	Mixed Recycling Stream			0.00	NA
High-Density Polyethylene (HDPE #2)	314.28	Mixed Recycling Stream			0.00	NA
Low-Density Polyethylene (LDPE #4)	9,730.02	Mixed Waste Stream (Energy Recovery)			0.00	NA
Polypropylene (PP #5)	250.86	Mixed Recycling Stream			0.00	NA
Condensed Polystyrene (PS-C #6)	69.73	Mixed Recycling Stream			0.00	NA
Expanded Polystyrene (PS-E #6)	29.05	Mixed Waste Stream (Energy Recovery)			0.00	NA
Other Plastic (#7)	99.21	Mixed Waste Stream (Energy Recovery)			0.00	NA
Aluminum Food and Beverage Cans	152.91	Mixed Recycling Stream			0.00	NA
Steel Food and Beverage Cans	0.00	Mixed Recycling Stream			0.00	NA
Glass Bottles & Jars for Food & Beverage	279.76	Mixed Recycling Stream			0.00	NA
Polycoats	74.46	Mixed Recycling Stream			0.00	NA
Mixed Recycling ¹	14,330.00	Mixed Recycling Stream			14,330.00	52.14%
Scrap Metal	24,354,883.88	Scrap Metal Recycling Stream			24,354,877.39	100.00%
Cardboard (Corrugated)	272,039.11	Mixed Recycling Stream			271,200.00	99.69%
Boxboard	644.29	Mixed Recycling Stream			0.00	NA
Mixed Paper (Fine Paper & Newsprint)	1,310.47	Mixed Recycling Stream			0.00	NA
Tissues & Paper Towel	26,595.90	Mixed Waste Stream (Energy Recovery)			0.00	NA
Solid Food Waste	15,474.64	Mixed Waste Stream (Energy Recovery)			0.00	NA



F&P Manufacturing Inc.: 2023 Waste Audit Report

		Mixed Waste		
Other Organic Materials	1,853.22	Stream (Energy	0.00	NA
		Recovery)		
Scrap Wood	13,448.74	Wood Recycling	13,430.00	99.86%
Scrap wood	15,440.74	Stream	13,430.00	33.00%
Sludge	28,620.00	Mixed Waste	0.00	NA
Sludge	26,020.00	Stream (Landfill)	0.00	INA
Disposable Food		Mixed Waste		
•	2,201.94	Stream (Energy	0.00	NA
Packaging		Recovery)		
		Mixed Waste		
Coffee Cups	4,679.39	Stream (Energy	0.00	NA
		Recovery)		
		Mixed Waste		
Textile Gloves	42,239.11	Stream (Energy	0.00	NA
		Recovery)		
Personal Protective		Mixed Waste		
	1,258.17	Stream (Energy	0.00	NA
Equipment	Recovery)			
Non-Recyclable		Mixed Waste		
Packaging	5,510.01	Stream (Energy	0.00	NA
Packaging		Recovery)		
		Mixed Waste		
Labels and Label Backing	8,741.27	Stream (Energy	0.00	NA
		Recovery)		
		Mixed Waste		
Other Waste	7,792.63	Stream (Energy	0.00	NA
		Recovery)		

^{*} Estimated Waste Produced = Waste Diverted (3Rs) + Waste Disposed

¹Taking into consideration that plastics (PET #1, HDPE #2, PP #5, PS-C #6), aluminum, steel, gable top, Tetra Pak containers, paper and boxboard are collected through the mixed recycling stream, it is not possible to calculate a diversion rate for each category. Therefore, a "N/A was applied to these materials and an overall rate was calculated under "Mixed Recycling Materials".

I hereby certify that the information provided in this Report of a Waste Audit is complete and correct.				
Signature of Authorized Official: Title: Date:				
Jim Walcolm	HS Manager	July 21, 2023		

^{**} Estimated Waste Diversion Rate = Amount of Waste Diverted (3Rs) / Estimated Waste Produced x 100%