FIVE YEAR WASTE MANAGEMENT PLAN

Seneca

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1.0 Seneca College Campuses

Established in 1967, Seneca College of Applied Arts and Technology is a public college with over 107,000 students. There are six main campuses and four community campuses located across Southern Ontario. The campuses collectively offer over 290 programs and more than 500 career options. Seneca's programs include: Applied Arts, Health Science, Sciences, Applied Engineering Technology, Business, Communication, Art & Design,



Liberal Arts, Continuing Education and Training, and Workforce Skills Development.

The following is a list of campuses and their locations.

Campus	Address
Newnham Campus	1750 Finch Avenue East
York Campus	70 The Pond Road (at York University's Keele Campus)
King Campus	13990 Dufferin Street
Markham Campus	8 The Seneca Way
Jane Campus	21 Beverly Hills Drive
Peterborough Aviation Campus	925 Airport Road, Unit 580
Community Campuses: Newmarket Scarborough Vaughan	16655 Yonge Street, Unit 3 3660 Midland Avenue, 2 nd Floor 1490 Major Mackenzie Drive West, Unit D5
Yorkgate	1 York Gate Boulevard

1.1 Seneca's Recycling Programs

Use the following tables as a guide for properly handling and recycling your materials.

PAPER	CANS, GLASS & PLASTIC	COMPOST	GARBAGE
✓ Newspaper ✓ Cup sleeves (paper/cardboard) ✓ Clean corrugated cardboard ✓ Boxboard (e.g. cereal and tissue boxes) ✓ Paper pulp drink trays ✓ Fine paper (printed pages, lined paper, note pads) ✓ Flyers and catalogues ✓ Card and cover stock ✓ Brown and window envelopes ✓ Books	 ✓ Plastic materials including: ○ Plastic lids ○ Plastic bottles, jugs, and jars ○ Plastic containers ○ Plastic hair care product bottles ✓ Aluminum and metal cans and containers ✓ Milk containers and juice boxes ✓ Clear and colored glass bottles ✓ Plastic shrink wrap 	✓ Compostable bowls ✓ Food products such as:	 ✓ Beverage cups ✓ Condiment packages ✓ Food packaging (e.g. chip bags, wrappers, etc.) ✓ Aluminum foil and cling wrap ✓ Greasy, oily, and food stained boxes/wrappers ✓ Grease proof containers (e.g. fry and burger containers etc.) ✓ Styrofoam and plastic utensils ✓ Waxed cardboard ✓ Sanitary products (i.e. baby wipes, cotton balls, ear cleaner, make-up removal pads) ✓ Cigarette butts ✓ Corks ✓ Disposable mop sheets ✓ Dryer lint or sheet ✓ Gum ✓ Wax paper ✓ Vacuum bags & contents ✓ Padded envelopes

ELECTRONIC WASTE	BATTERIES	LIGHT BULBS	TEXTILES	USED COOKING
(Faculty Only program)				GREASE & OIL
✓ Computers (keyboards, monitors, and other components) ✓ Tablets ✓ Televisions ✓ Consumer electronics ✓ Cell phones ✓ Speakers and audio equipment ✓ Camera and video records ✓ Printers and scanners	 ✓ Sealed cell alkaline batteries ✓ Lead acid batteries ✓ Zinc air batteries ✓ Carbon-zinc batteries ✓ Air depolarized zinc (carbonaire) batteries - nontoxic ✓ Air depolarized zinc (carbonaire) batteries - toxic (containing mercury) ✓ Nickel cadmium batteries (vented and sealed cell) ✓ Nickel iron batteries ✓ Nickel metal hydride batteries ✓ Lithium batteries ✓ Lithium ion batteries ✓ Silver oxide batteries ✓ Mercury batteries ✓ Magnesium batteries 	 ✓ Fluorescent tubes (2ft – 8ft) ✓ U-tube ✓ Compact fluorescent bulbs ✓ Incandescent bulbs ✓ Halogen 	✓ Gently used clothing ✓ Towels ✓ Fabric ✓ Shoes ✓ Sheets	✓ Cooking oil
Place all e-waste in the labeled containers located in the main waste and recycling depots at Newnham Campus, King Campus, Seneca@York Campus and Markham Campus.	Place all spent batteries in the labeled containers located in the main waste and recycling depots at Newnham Campus, King Campus, Seneca@York Campus and Markham Campus.	Place all spent light bulbs & tubes in the designated containers located in the main waste and recycling depots at Newnham Campus, King Campus, Seneca@York Campus and Markham Campus.	Place all textile materials in the designated container located waste depots.	Place all used cooking oil into the designated containers located in the main waste depots.

Seneca's On-site Equipment

Seneca College Administration is responsible for the management of the waste streams generated by faculty and students. There is a waste and recycling depot located at each campus and listed below is a summary of all the major equipment and the process of managing waste:

Newnham Campus

Location	Material	Equipment
	Garbage	Compactor
	Garbage (grounds)	Roll-off container
	Cardboard/Mixed Paper	Compactor
Loading Dock	Cans, Glass, Plastic Bottles, and Polycoat Cartons	Front-end bin
3	Pre-Consumer Organics	Collected in buckets and brought to the Rocket.
	Post-Consumer Organics and Coffee Grounds	32 gallon totes
	Grease	Grease bin

York Campus

Location	Material	Equipment
Loading Dock	Mixed Material Compactor: garbage and beverage container recycling (cans, glass, plastic bottles, and polycoat cartons) in separate bags - sorted by waste hauler offsite	Compactor
	Electronic Waste	Collection bins
Outside (near loading dock)	Paper and Cardboard	Front-end bin

King Campus

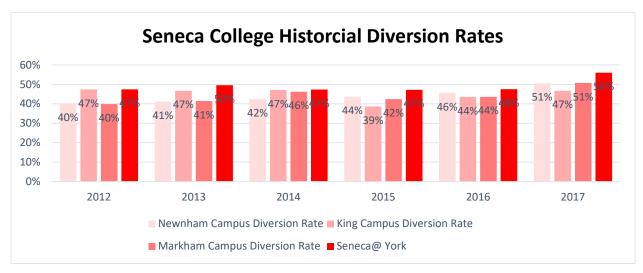
Location	Material	Equipment	
	Garbage	Compactor	
	Cardboard	Front-end bin	
	Grease	Grease drum	
Garriock Hall	Pre-Consumer Organics	Collected in buckets and brought to the Rocket.	
	Post-Consumer Organics and Coffee Grounds	32 gallon totes	
	E-Waste	Metal cages	
Maintenance Yard	Garbage	Front-end bin	
Recreation Island	Garbage	Front-end bin	
	Garbage	Front-end bin	
Vet Tech.	Manure/ Landscape	Open top bin	
	Garbage	Compacted front-end bin	
Residence	Cardboard and Paper	Front-end bin	
	Cans, Glass, Plastic Bottles, Polycoat Cartons	Front-end bin	
Eaton Hall	Garbage	Compacted front-end bin	

Markham Campus

Location	Material	Equipment
	Mixed Materials: garbage and recyclables (mixed paper materials and cans, glass, and plastic beverage containers) in separate bags - sorted by waste hauler off-site	Compactor
	Cardboard	Front-end bin
Waste & Recycling	E-Waste	Metal cages
Depot	Organics	Collected and brought to the Rocket. Additionally, totes are place in the kitchens to collect other organics materials.
	Grease	Grease bin
	Wood Skids	Stored loose on the loading dock.

1.2 Diversion Rates Since 2012

The chart below shows the historical diversion rates for Seneca College's campuses for the past five years. The diversion rate reported here is based on the on-site standard recycling/reuse methods. It excludes construction waste, hazardous wastes, off-site sorting of recyclables in the garbage, and waste-to-energy diversion methods.



As part of the *Waste Free Ontario Act*, 2016 the provincial government will implement a new set of diversion targets that align with the objectives and goals set out in the strategy. The following are the new diversion targets for Ontario:

- 30% diversion target by 2020
- 50% diversion target by 2030
- 80% diversion target by 2050

Seneca College has an extensive waste and recycling program which includes collection organics, textile and hazardous materials. In doing so, Seneca College has already achieved *Waste Free Ontario Act, 2016* goal of a 30% diversion rate by 2020 and will look to implement programs that help them achieve the next goal of a diversion rate of 50% by the year 2030.

1.3 Waste Auditing Practices

Our waste audits follow a structured methodology consistent with industry auditing procedures and the requirements of *Ontario Regulation 102/94* with a focus on data integrity, accuracy, and precision.

1. Documentation

- ✓ Obtain documentation on garbage and recycling at the site for the last twelve months, as provided by the site management staff (e.g. invoices, recycling certificates that confirm weights or quantities collected, etc.).
- √ Where documentation is not available, identify what needs to be examined onsite to calculate the quantities recycled.

2. Site Visit

- ✓ Interview staff for information about the current waste management program.
- ✓ Examine the equipment and infrastructure being used.
- ✓ Confirm that the site complies with the requirements of *Ontario Regulation* 103/94 by having a recycling program for the regulated materials.
- ✓ Determine the proportion of materials in the mixed recycling streams (e.g. proportion of paper, cardboard, aluminium cans and so on making up the total weight) through a Mixed Recycling Stream Composition Study.
- ✓ Determine the amount of recyclables present in the garbage stream through a Garbage Stream Composition Study.

3. Data Analysis

- ✓ Compile the data from the documentation and site visit.
- √ Using the data, calculate how much waste would be generated in a year.
- ✓ Calculate the capture and diversion rates, as well as the projected results from potential program improvements.

4. Ministry of Environment and Climate Change Paperwork

- ✓ Prepare a Waste Audit report, recommending opportunities for additional reduction, reuse, and recycling initiatives to be implemented in the Waste Reduction Work Plan.
- ✓ Complete the required *Ontario Regulation 102/94* Waste Audit & Waste Reduction Work Plan forms.

Recording this information will be important as it will provide a baseline for the institute and help focus the requirements for being compliant with the *Waste-Free Ontario Act, 2016.*

2.0 Importance of Recycling

Recycling effects everything on planet; earth resources, economic benefits, overall human health and community benefits. Simply put: Recycling is important if we would like to preserve the planet for future generations. Recycling is the stepping stone to ensuring that the environment and humans remain heathy as new products are created from the old products which no longer have value.

2.1 It's the Law

Ministry of the Environment and Climate Change's Environmental Protection Act

In the early 1990s, the Ontario government's programs and policies mirrored North American initiatives that addressed growing concerns regarding available landfill space as well as moves towards new legislation and provincial reduction targets. In 1994, the Ministry of the Environment and Climate Change introduced *Ontario Regulation 102/94*, "Waste Audits & Waste Reduction Work Plans" and *Ontario Regulation 103/94*, "Industrial, Commercial and Institutional Source Separation Programs." These regulations provide guidance and direction to large organizations on developing successful recycling programs, while making it mandatory for these organizations to monitor their waste and recycling practices on an ongoing basis. Ontario continues to promote initiatives in waste management with the passing of the *Waste Diversion Act* in 2002.

Ontario Regulation 102/94

Under Ontario Regulation 102/94, an educational institution with at least 350 students enrolled at any time during the calendar year must complete an annual waste audit and establish a waste reduction work plan. Seneca College meets this requirement and must comply with this regulation. The audit and work plan must be kept on file for five years and be made available to students, staff, and faculty.

Ontario Regulation 103/94

Ontario Regulation 103/94 requires Seneca College to have a Source Separation Program for specific waste materials. Under this regulation, students, staff, and faculty at Seneca are required to separate and recycle the following materials:

- Aluminum food or beverage cans (including cans made primarily of aluminum)
- 2. Cardboard (corrugated)
- Fine paper
- 4. Glass bottles and jars for food or beverages
- 5. Newsprint
- 6. Steel food or beverage cans (including cans made primarily of steel)

2.2 Save Money

Disposing of garbage in landfills is expensive. Associated costs include compactor services, landfill fees, transportation costs, fuel surcharges, and added expenses for equipment rentals. Reducing, reusing, and recycling can decrease these costs. Additional costs, or loss of credits for some recyclables, can also be incurred if recyclables become contaminated with materials that are not accepted in that stream, so proper sorting is also critical. By recycling materials into their proper bins, you give your waste a chance at a second life. Reducing the amount of waste generated from the source (for example, through prioritizing reusable items) results in less garbage to handle. Lowering our school's waste management costs can lead to more money to fund areas like student bursaries, clubs, and sports.

Seneca College has implemented a Pandora Monitoring system to track the compactors at each campus. The Pandora monitoring system measures the fullness of the compactors and will notify all parties (this includes and is not limited to the waste provider and the maintenance staff) when it reaches capacity; this helps to ensure that the compactors are being picked up only as needed instead of on a fixed collection schedule. Overall, the Pandora monitoring system helps to reduce the number of loads picked up which contributes to reducing the number of lift costs per year.

2.3 Building a Better Seneca Community

The Seneca College community has implemented various means of engaging with faculty and students through the Environmental Sustainability Committee (recently re-branded to *Sustainable* Seneca) on the sustainability initiatives at each campus. Some of these engagement measures include:

- Sustainability fair;
- Waste student ambassador;
- Community outreach events
- Pop-up information booths;
- Internal articles and updates to website 'did you know section';
- Waste and recycling program awareness survey for students and faculty;
- Newsletters and bulletins sent to students and facility VIA Blackboard and television messaging

These engagement tactics encourage students and faculty to become involved in creating a cleaner, greener Seneca College.

3.0 Waste Free Ontario Act

Introduced in 2016, the Waste Free Ontario Act, 2016 aims to introduce a circular economy eliminate waste, maximize value of materials by improving the design of materials, products and business models – which will lead to zero waste in Ontario. This includes eliminating waste and maximizing the value of materials by improving the design of materials, products, and business models. The Act is currently in the beginning stages of establishing productivity and recovery registries as well as developing a food and organics waste action plan. The course of action to achieve this goal includes preventing waste at the beginning of product manufacturing and no longer relying on "end-of-life" waste management practices. The goals of the Act can be accomplished by educating students, staff, and faculty; updating signage, promoting the amended 3R's program, and additions to the producer's responsibility regulations. The recording of the final destinations lies with multiple stakeholders such as producers, provincial bodies, and generators. Under the new producer responsibility regulations, producers will have to manage the "end-of-life" of products by either reducing materials used, developing reusable products, or reintegrating products back into the economy without disposal. The Waste Free Ontario Act, 2016 is a work in progress and the overall goal is to create a zero-waste province by creating a circular economy.

To support a shift toward a circular economy, Ontario passed the *Waste Free Ontario Act, 2016*, which enacted two acts: The *Resource Recovery and Circular Economy Act, 2016*, and the *Waste Diversion Transition Act, 2016*. The *Resource Recovery and Circular Economy Act, 2016* requires the Minister of the Environment and Climate Change to develop and maintain the *Strategy for a Waste-Free Ontario: Building the Circular Economy* to support the provincial interest in having a system of resource recovery and waste reduction.

Under the new legislation, the province is moving toward a circular economy framework by establishing a producer responsibility regime.

The Resource Recovery and Circular Economy Act, 2016:

- 1. Identifies the provincial interest in resource recovery and waste reduction to provide overarching government direction;
- 2. Establishes full producer responsibility by making producers environmentally accountable and financially responsible for recovering resources and reducing waste associated with their products and packaging; and
- 3. Establishes the Resource Productivity and Recovery Authority to operate the Resource Productivity and Recovery Registry (i.e. data clearinghouse) and oversee producer performance by conducting compliance and enforcement activities.

In implementing the *Resource Recovery and Circular Economy Act, 2016*, Ontario will consider "end-of-life" materials as resources rather than waste. Through regulations, the government will establish requirements that producers (i.e. brand holders and/or others with a commercial connection to designated products and packaging in Ontario) will have to meet, such as

reduction, reuse, and recycling targets; service standards; and promotion and education requirements.

The Waste Diversion Transition Act, 2016 will facilitate a transition of current waste diversion programs to the new producer responsibility framework. This will be done by allowing for existing waste diversion programs to continue operating without disruption until the wastes under those programs are transitioned to the new scheme. Once the wastes are transitioned, existing programs, and the industry funding organizations that operate them, will be eliminated.

Furthermore, Ontario will implement a new set of diversion targets that align with the objectives and goals set out in the strategy. The following are the new diversion targets for Ontario:

- 30% diversion target by 2020
- 50% diversion target by 2030
- 80% diversion target by 2050

The Waste-Free Ontario Act, 2016 and the Strategy for a Waste-Free Ontario will guide the changes outlined above and guide Ontario's progress over the next 10 years. The table on the following page outlines the timeline set out in the strategy.

Waste F	ree Ontario Act, 2016 Timeline
2017	Start transition of existing programs
	Develop and consult on first policy statement
	Develop and consult on Food and Organic Waste Action Plan
	Establish Resource Productivity and Recovery Registry
2018	Develop Ontario wide disposal bans (i.e. food waste, other materials under
	existing waste diversion programs)
	 Develop and consult on amendments to the 3Rs regulations
	Begin implementing first policy statement
	Begin implementing amended 3Rs regulations
	 Designating new materials under the producer responsibility regulation (i.e.
	batteries, fluorescent bulbs and tubes, additional Waste Electrical and
	Electronic Equipment (WEEE) materials)
2019	 Implementing amendments to 3Rs regulation (including food waste, e-waste,
	hazardous)
2020	GOAL FOR DIVERSION: 30%
	 Designate additional materials under producer responsibility regulations (e.g.,
	mattresses, carpets, furniture)
	 Complete transition of existing waste diversion programs (except Blue Box)
	 Specify the roles and responsibilities of all stakeholders (i.e. management,
	staff, faculty, students, and visitors)
2021	Start implementing disposal bans on materials under existing waste diversion
	programs
2022	 First release of the progress report on the Waste-Free Ontario Strategy
	Implement a food waste disposal ban
2023	Complete transition of the Blue Box program
	Continue to designate additional materials under the producer regulations
2024	Develop and consult on additional policy
2025	Begin to review the Waste-Free Ontario Strategy
	Continue to add materials under the producer responsibility regulations
2027	Release of the revised Waste-Free Ontario Strategy
2030	GOAL FOR DVIERSION: 50 %
2050	GOAL FOR DVIERSION: 80 %

4.0 Five Year Plan for Seneca College

In anticipation of the *Waste-Free Ontario Act*, Seneca College worked to create a five-year waste management plan that is aligned with the timelines of the *Waste-Free Ontario Act*. This will help to address the potential landfill bans on certain recyclable materials outlined by the *Waste-Free Ontario Act*. Additional measures will need to be taken to ensure that Seneca College is proactive in anticipating potential landfill bans which will also have a positive impact on the communities in which the campuses reside. Materials that may become subject to a disposal ban include organic waste, paper towels, light bulbs, batteries, electronic waste, and construction waste. The following initiatives and programs outlined in this document identify opportunities for Seneca College to continue to meet and exceed its waste management goals and minimize its waste footprint for the next five years.

Program Component	2018	2019	2020	2021	2022	
	ALL CAMPUSES					
Paper Towel Program	ALREADY IN PLACE AT EACH CAMPUS					
Battery Program		ALREADY II	N PLACE AT EACH CAMPUS			
Fluorescent Lighting		ALREADY II	N PLACE AT EACH CAMPUS			
Program						
Organics Program		ALREADY II	N PLACE AT EACH CAMPUS			
Plastic Reduction	Action Plan:	Action Plan:	Action Plan:	Action Plan:		
initiatives at each	Create discussion with Stakeholders	Implement strategies for	Continue to explore	Engage with other		
Campus	about providing alternatives to	reducing single use plastics.	alternative means of reducing	stakeholders that produce		
	plastic beverage containers.		other plastics generated on	plastics.		
	Research alternative companies and		campus.			
	products that provide less plastic and					
	strive for zero waste.					
	Implement Plastic-Free Farmers					
	Market at Newnham Campus.					
Construction Waste	Action Plan:					
Removal Policy	Review current policy.					
Electronic waste	Action Plan:	Action Plan:				
Program	Implement expansion of the e-waste	Continue to monitor program.				
	program to students.					
Biohazard Program	Action Plan:	Action Plan:				
	Implement biohazard program for	Continue to monitor program.				
	sharps and first aid waste generated					
	from students and public.					
Expand Organics to	Action Plan:	Action Plan:	Action Plan:			
Office spaces	Implement pilot organics program to	Continue to monitor program.	Review effectiveness of			
	the office kitchenettes to collect food		program and identify			
	and organic waste within the office		improvements for collection			
	spaces. procedures.					
Reduction plan for			Action Plan:	Action Plan:	Action Plan:	
Paper materials			Review the most recent	Engage faculty and	Implement strategies	
			waste audit results and assess	students about reducing	for reducing the amount	
			how much paper is generated	handouts provided during	of paper generated on	
			on each campus.	class by providing	campus.	
				documents online.		

Program Component	2018	2019	2020	2021	2022
Signage		Action Plan: Review and update signage. Order signage for CITE Building at Newnham campus.			
Notifications	Action Plan: Notifications sent to the students and staff VIA Blackboard and e-mails; website – "did you know" facts, internal articles. To be sent semi-annually.	Action Plan: To be sent semi-annually.	Action Plan: To be sent semi-annually.	Action Plan: To be sent semi-annually.	Action Plan: To be sent semi-annually.
Follow Up & Monitoring Each Program	Action Plan: On-going.	Action Plan: On-going.	Action Plan: On-going.	Action Plan: On-going.	Action Plan: On-going.
Education & Training	Action Plan: To be conducted as part of student orientation events. Develop sustainability fair video to continue to engage students on waste initiatives. Expand Sustainability Procurement Policy. Annual waste and recycling program awareness survey for students and faculty.	Action Plan: To be conducted as part of student orientation events. Explore updating content of Sustainability Fair Video to reflect changes to the waste and recycling program. Continue using this video as an education and awareness video. Annual waste and recycling program awareness survey for students and faculty.	Action Plan: To be conducted as part of student orientation events. Annual waste and recycling program awareness survey for students and faculty.	Action Plan: To be conducted as part of student orientation events. Annual waste and recycling program awareness survey for students and faculty.	Action Plan: To be conducted as part of student orientation events. Annual waste and recycling program awareness survey for students and faculty.
Hire Waste	Action Plan:	Action Plan:	Action Plan:	Action Plan:	Action Plan:
Ambassador	On-going.	On-going.	On-going.	On-going.	On-going.
Sustainability Fair	Action Plan: An education and promotional event highlighting sustainability initiatives at Seneca College.	Action Plan: On-going.	Action Plan: On-going.	Action Plan: On-going.	Action Plan: On-going.
Provincial Diversion Target			30%		
Waste-Free Ontario Act Timeline	Begin implementing amended 3Rs regulations.				Food waste disposal ban.

Program Component	2018	2019	2020	2021	2022
NEWNHAM	Action Plan:	Action Plan:	Action Plan:		
Equipment Updates	Explore increasing recycling bins for comingled recyclables such as glass, cans and bottles. ORDERED: New onsite organics processors.	CITE Building at Newnham opens. Continue to monitor collection frequency of equipment.	Update as needed.		
YORK	Action Plan:				
Textile Program	Explore expanding the textile program.				
Sustainability Fair		Action Plan: Integrate Sustainability Fair to be at York campus for Winter 2019.			
KING	Action Plan:	Action Plan:	Action Plan:		
Equipment Updates	Add bins to Garriock Hall Waste Depot. ORDERED: New onsite organics processors.	Explore adding recycling totes to Vet Tech and Maintenance Yard Waste Depots.	Implement strategy.		
Sustainability Fair	Action Plan: Integrate Sustainability Fair to be at King campus for Fall 2018.				
MARKHAM		Action Plan:			
Sustainability Fair		Integrate Sustainability Fair to be at Markham campus for Fall 2019.			

4.1 Action Plan for 2018

The following initiatives are to be implemented in 2018 in accordance with the Waste Management Program Strategy Plan.

Explore Plastic Reduction Initiatives at each Campuses

In anticipation of the *Waste-Free Ontario Act*, push for discussions with stakeholders about providing alternatives to plastic-based products. Research alternative products and companies that provide the same service but strive to produce less waste. This should be addressed when negotiating contracts with service providers and suppliers.

Action Plan:

- 1. Discuss with service providers and suppliers what their sustainability protocols are and how they are moving towards zero waste or waste free.
- 2. Negotiate using different materials that can be replacements for plastics.
- 3. Monitor purchases of plastic materials through cafeteria sales as well as perform waste audits to understand how much plastic material is being sent to landfill.
- 4. Get students involved: provide students the opportunity to understand the importance of moving away from plastic and guide them to invest in reusable containers.

Additionally, Seneca College should strive for their on-site vendors and visitors to move away from bringing plastics on to the campuses. As part of the reducing plastics initiatives, creating specific events that promote a plastic free environment. An example of this can be demonstrated through the farmers markets. By having a plastic free farmers market, it will help to promote the importance of reducing plastic and the goals that Seneca College are aiming for.

Action Plan:

- 1. Research alternatives to packaging for transporting produce and other materials.
- 2. Discuss with farmers about alternative products to use to package produce and other materials.
- 3. Get students and visitors involved: provide students the opportunity to understand the importance of moving away from plastic and guide them to invest in reusable containers.

Review Construction Waste Removal Policy

In anticipation of a landfill ban under the *Waste-Free Ontario Act*, review the current construction waste removal policy for construction or demolition projects conducted on-site.

Action Plan:

- 1. Waste management from construction projects begins with what comes into the campus's buildings. Efficient design and specification will reduce the amount of material coming onto the site and reduce the volume of waste.
- 2. All construction waste materials must be recycled, reused, and salvaged to the greatest extent possible.
- 3. Disposal procedure and bin locations to be reviewed with the contractors.
- 4. Develop and implement a construction waste removal policy that requires contractors to track the amount of waste generated from construction or demolition projects conducted on-site and recycle as much of this waste as possible.
- 5. Provide contractors with a tracking form before the beginning of the project to keep track of the waste generated on-site and the amount of waste recycled.
- 6. Review the construction waste removal policy annually and update as required.

Example of Salvageable Materials

- Dimensional Lumber
- Heavy Timber
- Steel Beams and Studs
- Millwork (door, paneling, cabinetry)
- Insulation Ductwork
- Electrical Equipment
- Light Fixtures, Windows, and Glass
- Ceiling Panels
- Plumbing Fittings and Fixtures

Example of Recyclable Materials

- Structural Concrete
- Dimensional Lumber
- Metals (piping, ductwork, electrical cable, rebar)
- Gypsum Wallboard
- Cardboard
- Plastics
- Packing Materials
- Wooden palettes

Expand E-waste Recycling Program to the Students

Electronic waste is becoming an increasingly large stream at Seneca College. Students have various electronics of their own such as laptops, cell phones, printers, mice, tablets, etc. Expanding the recycling program to students would allow Seneca College to educate students on electronic waste recycling as well as increase diversion from landfill. As of 2018, Seneca College will be providing bins in the main hallways for students to dispose of electronic devices for recycling.

Action Plan:

- 1. Implement the program.
- Ensure signage has been added to the designated area where the e-waste recycling bins will be placed. Ensure signage lists accepted and not accepted materials and disposal instructions.
- 3. Ensure staff is trained on the details of the new program.
- 4. Communicate the new program to faculty and students (e.g. memos, community boards, etc.).

Follow-up & Monitoring:

- 1. Monitor faculty and students to ensure compliance with the new program.
- 2. Provide refresher training to staff on a semi-annual or annual basis to ensure the program is being followed.
- 3. Use promotional events throughout the year to bring awareness to the program and encourage participation by faculty and students (e.g. earth week, waste reduction week, etc.).

Implement Biohazard Program

In order to encompass all forms of waste produced at Seneca College and as a precaution for protecting the health and safety of the public, staff, and anyone handling the material, Seneca College will implement a biohazard program that is accessible by everyone.

Action Plan:

- 1. Implement the program.
- 2. Ensure signage has been added to the designated area where the biohazard bins will be placed. Ensure signage lists accepted and not accepted materials and disposal instructions.
- 3. Ensure staff is trained on the details of the new program.
- 4. Communicate the new program to faculty and students (e.g. memos, community boards, etc.).

Follow-up & Monitoring:

- 1. Monitor faculty and students to ensure compliance with the new program.
- 2. Provide refresher training to staff on a semi-annual or annual basis to ensure the program is being followed.
- Use promotional events throughout the year to bring awareness to the program and encourage participation by faculty and students (e.g. earth week, waste reduction week, etc.).

Expand Organics Recycling Program to Office Kitchenettes

Organic waste is a major waste stream generated at Seneca College. By implementing an organics recycling program on-site, Seneca College can eliminate another waste stream from landfill while also preparing for a future landfill ban under the *Waste-Free Ontario Act*. By expanding the organics program to include the office spaces at each campus, Seneca College can anticipate further increases in diversion with enhanced communications and monitoring of the organics recycling.

Action Plan:

- 1. Implement the program.
- 2. Ensure signage has been added to the designated area where the organics bins will be placed. Ensure signage lists accepted and not accepted materials and disposal instructions.
- 3. Ensure staff is trained on the details of the new program.
- 4. Communicate the new program to faculty and students (e.g. memos, community boards, etc.).

Follow-up & Monitoring:

- 1. Monitor faculty and students to ensure compliance with the new program.
- 2. Provide refresher training to staff on a semi-annual or annual basis to ensure the program is being followed.
- Use promotional events throughout the year to bring awareness to the program and encourage participation by faculty and students (e.g. earth week, waste reduction week, etc.)

Sustainability Fair: King Campus

The Sustainability Fair is an annual celebration of student and community initiatives in sustainability at Seneca College. It is organized by the Seneca College Sustainability Committee and the Waste Student Ambassadors and aims to inspire students, faculty, and staff to become involved with sustainability. This initiative started in March 2018 and will move between the campuses each semester. The fair will help to highlight what Seneca College is currently doing on campus to support a greener Toronto as well as provide students the opportunities to get involved in programs that they may not be aware exist on campus. By continuing to plan these events, Seneca students will be able gain knowledge on their campus and better perspective on why it is important to participate in the programs that are available to them.

Action Plan:

1. Integrate Sustainability Fair to be held at King Campus for Fall 2018.

Equipment Updates

In anticipation of the *Waste-Free Ontario Act*, ensure all campuses have the recommended amount of equipment on-site. Review current equipment lists and ensure all lift frequencies have been maximized or expand on the number of totes at King and Newnham Campuses.

Action Plan:

Newnham Campus

- Increase co-mingled bins for common areas*
 - a. In 2018, explore options, logistics, and budgeting to increase the name of comingled bins by the end of the year.
 - b. Ensure signage has been added to the designated area and ensure signage lists accepted and not accepted materials and disposal instructions.
 - c. Ensure staff are aware of the bin change.
 - d. Communicate the new placement of the bins to faculty and students (e.g. memos, community boards, etc.).

King Campus

- 1. Consider returning Cans and Bottles bins to Garriock Hall Waste Depot
 - a. In 2018, explore options, logistics, and budgeting to move bins by the end of the year.
 - b. Ensure signage has been added to the designated area where the organics recycling equipment will be kept. Ensure signage lists accepted and not accepted materials and disposal instructions.
 - c. Ensure staff are aware of the bin change.
 - d. Communicate the new placement of the bins to faculty and students (e.g. memos, community boards, etc.).

^{*}This was completed April 2018

Ordered:

For both Newnham and King campuses, a new on-site organics processor has been ordered and will be implemented by year end. The Rocket is a high-heat, pest-resistant, pathogen-destroying composter that recycles Newnham Campus' organics. The Rocket has proven to be a successful resource in processing organic material. The nutrient-rich compost produced is used in landscaping and community garden projects at Newnham and other campuses. About 409 tonnes of carbon dioxide emissions are saved with The Rocket annually - that's equal to taking 80 cars off the road for an entire year. As an added benefit, with a structure ideal for root generation and excellent moisture- and oxygen-retaining properties, application of chemicals on the grounds has not been needed onsite with the use of The Rocket compost. As Newnham campus continues to expand, a new processor has been ordered to help process the amount of organics generated. King campus is already capturing organics through a traditional heat pile in conjunction with the Landscape Management program. King campus is looking to expand their process by purchasing a Rocket for their campus.

Explore Expanding the Textile Program: York Campus

With a comprehensive recycling program now in place, focus on reducing the quantity of non-recyclable waste generated on-site to boost the College diversion rate and minimize Seneca's waste footprint. By expanding the current textile program to York Campus, the overall diversion rate for the campus will increase. Faculty and students can be encouraged to practice waste reduction measures such as donating gently used clothing to the fashion programs on campus as well as charitable donations centers rather than disposable options.

Action Plan:

- a. In 2018, explore options, logistics, and budgeting to add bins by the end of year.
- b. Implement the program.
- c. Ensure signage has been added to the designated area where the new recycling equipment will be kept. Ensure signage lists accepted and not accepted materials and disposal instructions.
- d. Ensure staff are aware of the new program.
- e. Communicate the new program and placement of the bins to faculty and students (e.g. memos, community boards, etc.)

Notifications and Program Summary Reminders

Distribute notices, newsletters, and internal articles to all faculty, students and staff on a regular interval to remind everyone about the waste program, highlight specific recycling programs (electronic waste, paper, etc.), update faculty, students and staff on any changes, share diversion rate results and other performance measures, and reinforce the list of acceptable materials (provide a printable summary that can be posted in kitchenettes or other areas). These notices should be sent through e-mailed, Blackboard notifications and Seneca News to students to remind them of the program in place on-site and to encourage their participation in the program.

Action Plan:

- 1. Develop notices that feature tips and reminders on the waste program on-site.
- 2. Notices to be e-mailed or posted to Blackboard for faculty and students on a semi-annual basis.

Follow Up & Monitoring

Staff to inspect waste collected from common area containers and upon collection, record any particular areas where there is substantial contamination so that further investigation into who is not complying with the recycling program can be facilitated. This information is to be forwarded to the *Sustainable Seneca* team for follow up.

Continue Education & Training

Provide education and training to faculty, students and contracted staff about the recycling program. Training is recommended at least once a year. A training package that summarizes the program should be prepared and distributed during the training session and can be provided to new members who start employment after the initial training has been conducted.

Student orientation events that highlight the recycling program also provide an opportunity to engage and educate faculty and students about the recycling programs in place. Annual events will be coordinated alongside national environmental themed events (e.g. Beginning of each semester, Earth Day, Waste Reduction Week, etc.). As part of this, share the *Annual Waste and Recycling Program Awareness* survey to highlight key differences between recycling programs implemented at other educational facilities as well as the differences from household recycling programs. Ask for feedback from students and faculty on how they feel the program can encompass a wider demographic.

Hire Student Sustainability Ambassador

Hiring a student as a representative for Seneca College's sustainability program will help to provide a bridge between maintenance faculty and students. These students play a pivotal role in welcoming first-year students and their families to Seneca College. In addition to educating on how to compost and recycle, ambassadors help facilitates surveys which will aid in providing students with the information regarding the college's sustainable operations. The passions of the Sustainability Ambassadors will inspire new students to be champions of sustainability on campus and beyond. The Ambassadors serve as role models for sustainable behaviors and assist their peers in this culture shift as well. They can be seen carrying reusable mugs and water bottles to stay hydrated, helping first-year students learn how to sort their waste, and encouraging others to participate in these initiatives as well as attend events put on by the college.

4.2 Action Plan for 2019

The following initiatives are to be implemented in 2019 in accordance with the Waste Management Program Strategy Plan.

Implement Plastic Reduction Strategies

Continue to work with vendors about the opportunities to move away from plastics. Research other companies that provide less plastic products and negotiate in a procurement meeting. These initiatives are important as they will reduce plastic waste generation through identifying alternative materials that are either more desirable to recycle or have a better lifecycle. Other alternatives for reducing plastic include:

- 1. Replacing plastic cutlery
- 2. Removing straws from cafeteria
- 3. Providing students with reusable water bottles, plastic bags, and mugs.
- 4. Implement plastic free events (i.e. farmers market).

Review Signage

Review the effectiveness of the current signage. Explore alternative means of communication with students (i.e. enhancing pictures of materials, adding text etc.); ensure that the signage matches the accepted materials within the program. Uniform signage allows for easier recognition, consistency for faculty and students, and reinforces the importance of the program. New and consistent signage will also reinvigorate faculty, students, staff and visitors on the recycling program to aid in increasing participation and ultimately the diversion rate.

Action Plan:

- 1. Review an updated and detailed list of accepted and not accepted materials for the garbage and recycling programs on-site from the hauler.
- 2. Explore developing signage that is easy to read (e.g. large font) and contains lots of images.
- 3. Ensure old signage is replaced with new signage and signage is placed in visible areas.
- 4. Ensure signage is updated after a new program is implemented or if acceptance criteria change.

Additionally, order new signage for CITE Building. These signs should look the same and have the same information as the ones at the main building.

Action Plan:

- 1. Review current signage at Newnham Campus and ensure they are updated with the most recent list of accepted and not accepted materials for the garbage and recycling programs on-site from the hauler.
- 2. Put signage up above garbage and recycling bins; ensure the signage is clear and contains lots of images.

Education and Training: Adding to Sustainability Fair Video

With a comprehensive recycling program now in place, it is important for students and faculty to know how material is disposed of on campus. In 2018, a video was created that highlighted students' reflections on waste within the campus. By expanding this video to encompass how material is moved throughout the campus, it will help to engage and inform students on where it goes after they put it in the bin.

Action Plan:

- 1. Collaborate with staff about recording a regular collection of material, demonstrating how it is picked up, what the multi-colored bags mean, and where it ends up.
- 2. Get students involved in why it is important to separate materials at the common area bins.
- 3. Continue to update video with relevant information as needed.

Explore Additional Equipment Feasibility

In anticipation of the *Waste-Free Ontario Act*, ensure all campuses have the recommended amount of equipment on-site. Review current equipment lists and ensure all lift frequencies have been maximized or expand on the number of totes at King, Markham and York Campuses.

Action Plan:

King Campus

- 1. Explore adding recycling totes to the Vet Tech and maintenance yard depots
 - a. In 2019, explore options, logistics and, budgeting to add bins by end of year.
 - b. Ensure signage has been added to the designated area where the new recycling equipment will be kept and ensure signage lists accepted and not accepted materials and disposal instructions.
 - c. Ensure staff are aware of the bin change.
 - d. Communicate the new placement of the bins to faculty and students (e.g. memos, community boards, etc.).

Explore Purchasing Equipment for CITE Building at Newnham Campus

As the new building opens, it is important to assess that the infrastructure has sufficient equipment required for disposing of all materials; this can be done by predicting the student population increase as well as conducting a waste audit. By conducting an audit, it will help to determine if the types of materials generated are different (i.e. labs and workshops will generate different materials than a classroom).

Action Plan:

- 1. Review past waste audits to determine if materials generated will be similar.
- 2. Review equipment infrastructure recommendations (provided by either the waste and recycling hauler or consulting companies).
- 3. Predict the number of students and faculty using the facilities.

Follow-up & Monitoring:

- Monitor faculty and students to ensure compliance with the new program.
- 2. Provide refresher training to staff on a semi-annual or annual basis to ensure the program is being followed.
- Use promotional events throughout the year to bring awareness to the program and encourage participation by faculty and students (e.g. earth week, waste reduction week, etc.).

Sustainability Fair: York and Markham Campuses

Continue to expand the Sustainability Fair to the other campuses. As part of an annual celebration of student and community initiatives in sustainability at Seneca College, it is important that all campuses have the opportunity to participate and learn about the initiatives that Seneca College is working towards. By continuing to plan these events, Seneca students will be able gain knowledge on their campus and better perspective on why it is important to participate in the programs that are available to them.

Action Plan:

- 1. Integrate Sustainability Fair to be held at York Campus for Winter 2019.
- 2. Integrate Sustainability Fair to be held at Markham Campus for Fall 2019.

Notifications and Program Summary Reminders

Distribute notices, newsletters, and internal articles to all faculty, students and staff on a regular interval to remind everyone about the waste program, highlight specific recycling programs (electronic waste, paper, etc.), update faculty, students and staff on any changes, share diversion rate results and other performance measures, and reinforce the list of acceptable materials (provide a printable summary that can be posted in kitchenettes or other areas). These notices should be sent through e-mailed, Blackboard notifications and Seneca News to students to remind them of the program in place on-site and to encourage their participation in the program.

Action Plan:

- 1. Develop notices that feature tips and reminders on the waste program on-site.
- 2. Notices to be e-mailed or posted to Blackboard for faculty and students on a semi-annual basis.

Follow Up & Monitoring

Staff to inspect waste collected from common area containers and upon collection, record any particular areas where there is substantial contamination so that further investigation into who is not complying with the recycling program can be facilitated. This information is to be forwarded to *Sustainable Seneca* for follow up.

Continue Education & Training

Provide education and training to faculty, students and contracted staff about the recycling program. Training is recommended at least once a year. A training package that summarizes the program should be prepared and distributed during the training session and can be provided to new members who start employment after the initial training has been conducted.

Student orientation events that highlight the recycling program also provide an opportunity to engage and educate faculty and students about the recycling programs in place. Annual events will be coordinated alongside national environmental themed events (e.g. Beginning of each semester, Earth Day, Waste Reduction Week, etc.). As part of this, share the *Annual Waste and Recycling Program Awareness* survey to highlight key differences between recycling programs implemented at other educational facilities as well as the differences from household recycling programs. Ask for feedback from students and faculty on how they feel the program can encompass a wider demographic.

Hire Student Sustainability Ambassador

Hiring a student as a representative for Seneca College's sustainability program will help to provide a bridge between maintenance faculty and students. These students play a pivotal role in welcoming first-year students and their families to Seneca College. In addition to educating on how to compost and recycle, ambassadors help facilitates surveys which will aid in providing students with the information regarding the college's sustainable operations. The passions of the Sustainability Ambassadors will inspire new students to be champions of sustainability on campus and beyond. The Ambassadors serve as role models for sustainable behaviors and assist their peers in this culture shift as well. They can be seen carrying reusable mugs and water bottles to stay hydrated, helping first-year students learn how to sort their waste, and encouraging others to participate in these initiatives as well as attend events put on by the college.

4.3 Action Plan for 2020

The following initiatives are to be implemented in 2020 in accordance with the Waste Management Program Strategy Plan.

Plastic Reduction Initiatives at each Campus

With a comprehensive recycling program in place, focus can now be shifted to reducing the quantity of non-recyclable waste generated on-site to boost Seneca's diversion rate and minimize Seneca's waste footprint. Materials generated by vendors (i.e. food packaging waste or cleaning supplies) is the main source of non-recyclable waste. Faculty and students can be encouraged to practice waste reduction measures such as using reusable Tupperware containers or reusable drinking vessels rather than disposable options. Seneca College is creating an in-depth Sustainability Procurement Policy — this will allow negotiations regarding types of materials produced on-site to be better managed as well as drive incentives on the producers to provide products that fit within the Circular Economy Policy.

Action Plan:

- 1. Collaborate with on-site vendors to offer incentives to customers who bring reusable containers versus requiring disposable options.
- Explore with on-site food service providers food packaging waste reduction initiatives, such as sourcing and using compostable food packaging that can be recycled in the organics recycling program.
- 3. Discuss with custodial and construction companies about managing and disposing of materials they produce on-site.
- 4. Confirm with the waste hauler that compostable food packing waste is an accepted material in the organics recycling program.
- 5. Ensure the new initiative is communicated to faculty and students.

Research Reduction Initiative for Paper Generated at each Campus

As an educational institution, Seneca College will generate a large amount of paper products. These materials have a program for recycling but it is important to recognize that the *Waste Free Ontario Act, 2016* strives to increase waste reduction and reuse ahead of recycling. It encourages programs to attempt to reduce the amount of materials generated. After reviewing the waste audit trends and analyzing the amount of paper generated from year to year, Seneca College should look towards way to reduce the amount of materials produced. This can be done by implementing a program that aims to eliminate the excessive amount of paper generated on campus.

Action Plan:

- 1. Review the amount of paper generated on site by analyzing the annual waste audit results.
- 2. Investigate where the material is being generated (i.e. classrooms, printer rooms, faculty and staff office spaces).
- 3. Assess the best way possible to reduce the amount of materials utilized at each campus.

Additionally, start to promote the importance of reducing paper products on campus.

Action Plan:

1. Have notices go out to students and faculty highlighting the importance reduce their paper footprint.

Implement Equipment Updates: King and Newnham

Action Plan:

- 1. Implement equipment update strategy.
- Ensure signage has been added to the designated area where the recycling equipment will be kept and ensure signage lists accepted and not accepted materials and disposal instructions.
- 3. Ensure staff are aware of additional equipment and are trained on how to use it.
- 4. Communicate where the additional bins are placed to faculty and students (e.g. memos, community boards, etc.).

Follow-up & Monitoring:

- 1. Monitor faculty and students to ensure compliance with the new equipment.
- 2. Provide refresher training to staff on a semi-annual or annual basis to ensure the program is being followed.
- 3. Use promotional events throughout the year to bring awareness to the program and encourage participation by faculty and students (e.g. earth week, waste reduction week, etc.).

Notifications and Program Summary Reminders

Distribute notices, newsletters, and internal articles to all faculty, students and staff on a regular interval to remind everyone about the waste program, highlight specific recycling programs (electronic waste, paper, etc.), update faculty, students and staff on any changes, share diversion rate results and other performance measures, and reinforce the list of acceptable materials (provide a printable summary that can be posted in kitchenettes or other areas). These notices should be sent through e-mailed, Blackboard notifications and Seneca News to students to remind them of the program in place on-site and to encourage their participation in the program.

Action Plan:

- 1. Develop notices that feature tips and reminders on the waste program on-site.
- 2. Notices to be e-mailed or posted to Blackboard for faculty and students on a semi-annual basis.

Follow Up & Monitoring

Staff to inspect waste collected from common area containers and upon collection, record any particular areas where there is substantial contamination so that further investigation into who is not complying with the recycling program can be facilitated. This information is to be forwarded to *Sustainable Seneca* for follow up.

Continue Education & Training

Provide education and training to faculty, students and contracted staff about the recycling program. Training is recommended at least once a year. A training package that summarizes the program should be prepared and distributed during the training session and can be provided to new members who start employment after the initial training has been conducted.

Student orientation events that highlight the recycling program also provide an opportunity to engage and educate faculty and students about the recycling programs in place. Annual events will be coordinated alongside national environmental themed events (e.g. Beginning of each semester, Earth Day, Waste Reduction Week, etc.). As part of this, share the *Annual Waste and Recycling Program Awareness* survey to highlight key differences between recycling programs implemented at other educational facilities as well as the differences from household recycling programs. Ask for feedback from students and faculty on how they feel the program can encompass a wider demographic.

Action Plan:

1. For 2020, look to add an additional section in the survey that inquires about the amount of paper they print off at home or at school.

Hire Student Sustainability Ambassador

Hiring a student as a representative for Seneca College's sustainability program will help to provide a bridge between maintenance faculty and students. These students play a pivotal role in welcoming first-year students and their families to Seneca College. In addition to educating on how to compost and recycle, ambassadors help facilitates surveys which will aid in providing students with the information regarding the college's sustainable operations. The passions of the Sustainability Ambassadors will inspire new students to be champions of sustainability on campus and beyond. The Ambassadors serve as role models for sustainable behaviors and assist their peers in this culture shift as well. They can be seen carrying reusable mugs and water bottles to stay hydrated, helping first-year students learn how to sort their waste, and encouraging others to participate in these initiatives as well as attend events put on by the college.

4.4 Action Plan for 2021

The following initiatives are to be implemented in 2021 in accordance with the Waste Management Program Strategy Plan.

Engage Students and Faculty in Programs to Reduce Paper materials

Looking forward in the *Waste Free Ontario Act, 2016* the Interim goals for Diversion increase in 2030 and 2050 from the 30% target established for 2020. In order to remain compliant and meet the provincial goals, Seneca College should look to implement reduction programs that aim to reduce the generation of materials. Seneca College has implemented computer programs (i.e. Outlook and Blackboard) to allow faculty and students to connect electronically with course materials; this includes lecture materials, hand outs and quizzes. Although these programs are in place, a lot of course materials are printed by faculty and bought to class which causes the amount of materials in the paper recycling stream to increase. By creating a discussion between faculty and students about the reducing the number of documents printed and only providing digital copies of course materials, will help increase the diversion rate at each campus in order to meet the Provincial targets.

Action Plan:

- 1. Discuss with faculty and students about printing off documents for handouts in class.
- 2. Encourage faculty not to print items and push for students to look at the documents online or print them on their own.
- 3. Develop memos that feature tips and reminders on the reduction initiatives that Seneca College is implementing.
- 4. Conduct a survey of the faculty and students on ways they think paper generation could be reduced.

Notifications and Program Summary Reminders

Distribute notices, newsletters, and internal articles to all faculty, students and staff on a regular interval to remind everyone about the waste program, highlight specific recycling programs (electronic waste, paper, etc.), update faculty, students and staff on any changes, share diversion rate results and other performance measures, and reinforce the list of acceptable materials (provide a printable summary that can be posted in kitchenettes or other areas). These notices should be sent through e-mailed, Blackboard notifications and Seneca News to students to remind them of the program in place on-site and to encourage their participation in the program.

Action Plan:

- 1. Develop notices that feature tips and reminders on the waste program on-site.
- 2. Notices to be e-mailed or posted to Blackboard for faculty and students on a semi-annual basis.

Follow Up & Monitoring

Staff to inspect waste collected from common area containers and upon collection, record any particular areas where there is substantial contamination so that further investigation into who is not complying with the recycling program can be facilitated. This information is to be forwarded to *Sustainable Seneca* for follow up.

Continue Education & Training

Provide education and training to faculty, students and contracted staff about the recycling program. Training is recommended at least once a year. A training package that summarizes the program should be prepared and distributed during the training session and can be provided to new members who start employment after the initial training has been conducted.

Student orientation events that highlight the recycling program also provide an opportunity to engage and educate faculty and students about the recycling programs in place. Annual events will be coordinated alongside national environmental themed events (e.g. Beginning of each semester, Earth Day, Waste Reduction Week, etc.). As part of this, share the *Annual Waste and Recycling Program Awareness* survey to highlight key differences between recycling programs implemented at other educational facilities as well as the differences from household recycling programs. Ask for feedback from students and faculty on how they feel the program can encompass a wider demographic.

Hire Student Sustainability Ambassador

Hiring a student as a representative for Seneca College's sustainability program will help to provide a bridge between maintenance faculty and students. These students play a pivotal role in welcoming first-year students and their families to Seneca College. In addition to educating on how to compost and recycle, ambassadors help facilitates surveys which will aid in providing students with the information regarding the college's sustainable operations. The passions of the Sustainability Ambassadors will inspire new students to be champions of sustainability on campus and beyond. The Ambassadors serve as role models for sustainable behaviors and assist their peers in this culture shift as well. They can be seen carrying reusable mugs and water bottles to stay hydrated, helping first-year students learn how to sort their waste, and encouraging others to participate in these initiatives as well as attend events put on by the college.

4.5 Action Plan for 2022

The following initiatives are to be implemented in 2022 in accordance with the Waste Management Program Strategy Plan.

Implement Paper Reduction Initiatives

In anticipation of the *Waste-Free Ontario Act, 2016,* implement strategies for reducing paper generated at each campus.

Action Plan:

- Implement the program.
- 2. Ensure memos have been sent out to faculty and students about eliminating hand outs regarding course materials.

Follow-up & Monitoring:

- 1. Monitor faculty and students to ensure compliance with the new program.
- 2. Provide refresher training to staff on a semi-annual or annual basis to ensure the program is being followed.
- 3. Use promotional events throughout the year to bring awareness to the program and encourage participation by faculty and students (e.g. earth week, waste reduction week, etc.).

Notifications and Program Summary Reminders

Distribute notices, newsletters, and internal articles to all faculty, students and staff on a regular interval to remind everyone about the waste program, highlight specific recycling programs (electronic waste, paper, etc.), update faculty, students and staff on any changes, share diversion rate results and other performance measures, and reinforce the list of acceptable materials (provide a printable summary that can be posted in kitchenettes or other areas). These notices should be sent through e-mailed, Blackboard notifications and Seneca News to students to remind them of the program in place on-site and to encourage their participation in the program.

Action Plan:

- 1. Develop notices that feature tips and reminders on the waste program on-site.
- 2. Notices to be e-mailed or posted to Blackboard for faculty and students on a semi-annual basis.

Follow Up & Monitoring

Staff to inspect waste collected from common area containers and upon collection, record any particular areas where there is substantial contamination so that further investigation into who is not complying with the recycling program can be facilitated. This information is to be forwarded to *Sustainable Seneca* for follow up.

Continue Education & Training

Provide education and training to faculty, students and contracted staff about the recycling program. Training is recommended at least once a year. A training package that summarizes the program should be prepared and distributed during the training session and can be provided to new members who start employment after the initial training has been conducted.

Student orientation events that highlight the recycling program also provide an opportunity to engage and educate faculty and students about the recycling programs in place. Annual events will be coordinated alongside national environmental themed events (e.g. Beginning of each semester, Earth Day, Waste Reduction Week, etc.). As part of this, share the *Annual Waste and Recycling Program Awareness* survey to highlight key differences between recycling programs implemented at other educational facilities as well as the differences from household recycling programs. Ask for feedback from students and faculty on how they feel the program can encompass a wider demographic.

Hire Student Sustainability Ambassador

Hiring a student as a representative for Seneca College's sustainability program will help to provide a bridge between maintenance faculty and students. These students play a pivotal role in welcoming first-year students and their families to Seneca College. In addition to educating on how to compost and recycle, ambassadors help facilitates surveys which will aid in providing students with the information regarding the college's sustainable operations. The passions of the Sustainability Ambassadors will inspire new students to be champions of sustainability on campus and beyond. The Ambassadors serve as role models for sustainable behaviors and assist their peers in this culture shift as well. They can be seen carrying reusable mugs and water bottles to stay hydrated, helping first-year students learn how to sort their waste, and encouraging others to participate in these initiatives as well as attend events put on by the college.

5.0 Going Beyond the Five Years

The philosophy at Seneca College is continuous growth, with a focus on reducing, reusing and recycling waste generated across our campuses. In the 3Rs hierarchy, Seneca College is committed to reduction (elimination) as its first objective, followed by reuse initiatives and lastly recycling. The continuous improvement cycle focuses on tracking our performance through annual waste audits, implementing structural changes as identified through the audit, training and education, and use of ongoing programs throughout the year.

In the years that follow the implementation of this document, Seneca College will continue to maintain their focus on environmental sustainability by increasing their concentration in the area of waste reduction. Seneca College will to continue to exceed the targets set by the *Waste Free Ontario Act, 2016* and meet those requirements set forth by the Act in the future. Within their industry, Seneca College plans to be proactive by opening conversations and implementing waste reduction initiatives in their procurement policy; this will help put the responsibility on producers in order to achieve a circular economy. By continuing to maintain a sustainable commitment, Seneca College will continue to be examples in their industry and provide a standard against which other colleges can measure themselves.