

A photograph of three rubber boots repurposed as planters, mounted on a blue wooden wall. The boots are light blue, dark grey, and green. They are filled with various plants, including green leafy plants, purple and white flowers, and pink flowers. The boots are arranged in a triangular pattern.

SM4RT LIVING PLAN BALANCED SCORECARD

2014 TO 2017 HIGHLIGHTS

WASTE MANAGEMENT
york.ca/sm4rtliving


York Region

A photograph showing three repurposed tin can planters hanging from a stone wall. The planters are made of metal cans with different colors and patterns: a purple can with white polka dots, a blue can with green polka dots, and a yellow can with red polka dots. They are filled with various flowers, including red and orange daisies, yellow marigolds, and yellow chrysanthemums. The planters are suspended by black and yellow ropes. A white downspout is visible on the right side of the wall.

York Region and its local municipal partners developed the SM4RT Living Plan, a road map that identifies more than 60 initiatives to improve the sustainability of the integrated waste management system over the next 25 to 40 years. These initiatives include data collection, policies and new public programs to reduce and divert waste. Over the past four years, thousands of residents have helped us implement 32 priority initiatives with a focus on the 4R's: **reduce, reuse, recycle and recover.**



WHAT'S INSIDE

This scorecard will share success stories from the past four years while showcasing the key achievements and a 'spotlight' feature of 2017. We are celebrating the efforts brought forward by each local city or town and our key community partners. We would like to thank the residents who were engaged in these waste reduction initiatives and their continued efforts to reduce waste over the next five years of the plan.

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STATUS OF 32 INITIATIVES

✓ **Complete**



9

➔ **Piloting**



4

🔄 **Ongoing**



19

✓ **COMPLETE**

Occured and will not
continue

➔ **PILOTING**

In testing and
research stage

🔄 **ONGOING**

Expanded from
pilot to program

32 INITIATIVES

REDUCE		Status
1. Food Waste Survey and Research		↻
2. Food Waste Audits		↻
3. Evaluate Countertop Composting Technology		✓
4. On-site Community Composting		↻
5. 2017! Explore Approaches to Reducing Waste at York Region Facilities		↻
6. Green Procurement with School Boards and Local Municipal Partners		↻
7. Educational Support for Industrial, Commercial and Institutional Waste Generators		➡
8. Assess feasibility for Green Procurement Working Group		✓
REUSE		
9. Textile Collection		↻
10. Swap Events in Multi-Residential buildings		↻
11. Curbside Giveaway Events		↻
12. 2017! Promote Online Swapping Platforms		↻
13. 2017! Reuse Events with Community Partners		↻
14. Reuse Survey & Baseline Data Gathering		✓
15. 2017! Assess feasibility of Tool Sharing Library in York Region		➡
RECYCLE		
16. Advocacy for Master Plan Components		↻
17. Research Construction and Demolition Diversion Options		➡
18. Model Development Standards		↻
19. 2017! Assess Feasibility of Model Multi-Residential By-Law		↻
20. Assess Technology for Organics Programs in Multi-Residential Buildings		↻
21. 2017! Diversion Pilots in Multi-Residential Buildings		↻
22. Multi-Residential Website and Database		↻
23. Volume Based Billing and Tracking		✓
24. Municipal Industry Program Committee Funding Formula and Calculations		✓
25. Tracking Changes in Material Composition at Materials Recovery Facility		↻
26. Source Separated Organics Feasibility Study		↻
27. Reuse and Recycle Expansion at Community Environmental Centres		➡
28. 2017! Establish Performance Indicators for Depots/Community Environmental Centres		↻
RECOVER		
29. 2017! Assess Long-Term Capacity Needs for Residual Waste		✓
30. Policy development for Energy from Waste		✓
31. Review Triggers for Energy from Waste Expansion		✓
OTHER		
32. Full Cost Accounting Study		✓

✓ Complete

➡ Piloting

↻ Ongoing



COMMUNITY ENGAGEMENT

SOCIAL MEDIA AND WEBSITE



EVENTS





PARTNERSHIPS

Over 15 new partnerships have been leveraged in the Region since 2014. Some key partnerships are:



YORK REGION FOOD NETWORK

Hosted composter build, 14 food waste workshops and promoted the Good Food program at events throughout the Region.



YORK SCHOOL BOARDS

Delivered the waste education program Trash Blasters to 3,548 students and supported other various waste education programs.



NEWMAKEIT

Developed and delivered Repair Cafés, including two in 2017 and six planned for 2018 throughout the Region.



TORONTO AND REGION CONSERVATION AUTHORITY

Hosted initiatives such as a composter build, workshops and a Repair Café at Kortright Centre for Conservation.



HOUSING YORK INC.

Multi-residential buildings hosted swap events, piloted new recycling initiatives and educated residents on a range of environmental initiatives.



YORK UNIVERSITY

Utilized academic expertise to enhance waste audit process and increased efficiencies for ongoing initiatives.

REDUCE

LET'S
CELEBRATE
2014 to 2017



THE TOWN OF RICHMOND HILL HAS DISTRIBUTED OVER 300 BACKYARD COMPOSTERS SINCE 2014.

ALL RESIDENTS HAVE ACCESS TO COMPOSTER SALES THROUGH LOCAL AND REGIONAL EVENTS IN THE TOWNS OF AURORA, WHITCHURCH-STOUFFVILLE, NEWMARKET AND EAST GWILLIMBURY, THE CITY OF VAUGHAN AND THE TOWNSHIP OF KING.

Waste reduction offers substantial environmental benefits and future cost avoidance for both residents and the municipal waste management system.

The 2031 target includes reduction of green bin material by 15 per cent, yard waste by five per cent and other waste streams by five per cent. Since 2014, eight initiatives focused on reduction have been piloted.

2014 TO 2017 KEY SUCCESSES



* Estimated



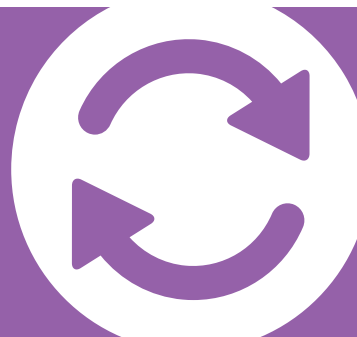
2017 SPOTLIGHT: GOOD FOOD

The Good Food program emerged from the SM4RT Living Plan's goal to achieve a 15 per cent reduction in food waste found in the green bin by 2031. This award-winning program is designed to prevent food waste by promoting benefits and creating new habits such as meal planning, shopping with a list and proper food storage.

In 2017, new tools were created and an extensive survey was conducted. Seasonal messages featured New Years, Back to School and 12 Days of Holiday Tips. Elementary schools were engaged with Good Food messages through York Region's Trash Blasters program, as well as new partnerships with York Region Nutrition, You're the Chef Cook-off and the Towns of Aurora and Georgina Healthy Kids Community Challenge.



REUSE



LET'S CELEBRATE 2014 to 2017

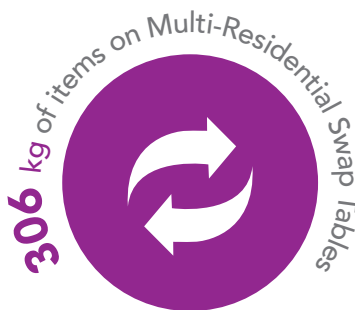


69% OF YORK REGION RESIDENTS HAVE ACCESS TO MUNICIPAL TEXTILE COLLECTION BINS IN THEIR COMMUNITIES. THE CITY OF MARKHAM, TOWN OF AURORA, TOWN OF WHITCHURCH-STOUFFVILLE AND TOWNSHIP OF KING HAVE IMPLEMENTED A TEXTILE PROGRAM. EXPANSION IS PLANNED TO OTHER COMMUNITIES IN 2018.

In the SM4RT Living Plan, reuse is applied as an umbrella term encompassing reuse, repair and re-purpose. The Region recognizes the numerous benefits that come from supporting reuse activities and the reinvention of how goods and services are exchanged. By leveraging technology, we aim to take swapping, renting and sharing of goods and services to a new level.

The goal by 2031 is to lower garbage generation by five per cent through support of reuse initiatives, including the seven that were piloted since 2014.

2014 TO 2017 KEY SUCCESSSES





2017 SPOTLIGHT: REPAIR CAFÉ

NewMakelt is a collaborative space enabling residents to start innovative, creative, entrepreneurial and learning endeavors. Residents can utilize co-working space, rent meeting rooms, provide a creative space to access shared equipment and storage as well as serve as a hub for learning opportunities. NewMakelt has been a natural fit for partnering on promoting the concept of reuse through repair with York Region. Repair Cafés are free events that connect people who need items repaired with volunteer "fixers" who bring life back to belongings like small appliances, garden tools, electronics, and bicycles with the goal of reducing waste and bringing back the "if it's broke fix it" rule. Two Repair Cafés were held at the NewMakelt space in 2017 and this concept is spreading across the Region with six Repair Cafés planned for 2018 at local libraries and cafés.

"WE BUY SOMETHING, USE IT FOR A SPECIFIC PERIOD OF TIME, THEN CHUCK IT IN THE GARBAGE. WE HAVE TO GET AWAY FROM THAT. LET'S PURCHASE WITH THE INTENT THAT IF IT DOES BREAK, IT'S REPAIRABLE IN THE FUTURE."



Derrol,
NewMakelt

RECYCLE



THE TOWN OF EAST GWILLIMBURY HOSTS A 'GREEN UP, CLEAN UP' EVENT WHICH AIMS TO COLLECT LITTER FROM PUBLIC SPACES.

THE TOWN OF GEORGINA'S RESIDENTS PARTICIPATE IN A SWAP & SELL.

THE CITY OF VAUGHAN OFFERS FIVE ENVIRONMENTAL DAYS WHERE RESIDENTS CAN PARTAKE IN A MULCH GIVEAWAY, ELECTRONIC RECYCLING, CLOTHING COLLECTION, AND PURCHASE BACKYARD COMPOSTERS.

The goal supporting recycling in the SM4RT Living Plan was to increase material diverted from landfill by four per cent, which created the development of 13 pilot programs. These include staying engaged in extended producer responsibility and understanding the multi-residential community.

2014 TO 2017 KEY SUCCESSSES



* Environmental Bill of Rights

** Based on Multi-Residential Municipal Collection



ADVOCACY

The province of Ontario passed the *Waste-Free Ontario Act* in 2016, to introduce more producer responsibility into the waste system. York Region and its local municipal partners actively participate in consultations with the Province and other stakeholders, advocating for policies and regulations that deal with problematic materials, encourage sustainable packaging and preserve the integrity of the waste management system.

Increasingly complex packaging sold in the marketplace and tighter restrictions on contamination from end markets is increasing costs for managing the blue box. These problematic materials are difficult to sort and market resulting in contamination of the paper stream. York Region is working together with local municipal partners to identify solutions, minimize contamination and continue to provide education as necessary.



2017 SPOTLIGHT: MULTI-RESIDENTIAL

The SM4RT Living Plan recognizes the importance of developing policy and programs specific to multi-residential buildings to improve waste diversion. Collaboration between the Region and local municipal partners is key to success. The Regional Official Plan requires new multi-residential developments to provide convenient three-stream diversion programs for residents. The Cities of Markham and Vaughan have collaborated with their planning departments to ensure new buildings have waste systems set up to accommodate three-stream diversion. Trisorters or separate chutes for recycling and organics are just as convenient to access as garbage chutes. Waste staff review site plans as part of the approvals process to ensure consistency. City of Markham has also incorporated electronic waste and battery recycling, textile diversion programs and uses a Letter of Credit to ensure compliance.

The Town of Aurora collaborated with the Region to develop and deliver education and programs to share with building managers. New multi-residential recycling options included collection of batteries, compact fluorescent light bulbs, electronics and textiles recycling resulting in collection of over three tonnes of materials.

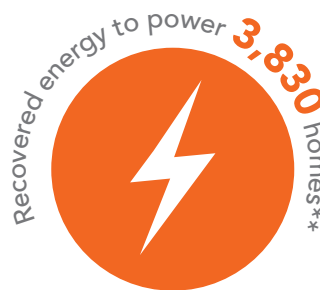
RECOVER



The goal of 'recover' is to re-claim resources from waste at its end of life. The recover goal aims to capture an additional 60 to 80 per cent of metals that would otherwise end up in landfill through energy-from-waste.

Energy-from-waste provides the benefit of capturing energy content of residual waste, lowers greenhouse gas emissions, recovers metals and reduces the volume of waste going to landfill by 90 per cent.

2014 TO 2017 KEY SUCCESSES



* 2015 to 2017

** Estimated annual recovery



2017 SPOTLIGHT: DURHAM YORK ENERGY CENTRE

The Durham York Energy Centre is a high performing facility which began processing residual waste in February 2015, with the ability to process 30,000 tonnes of residential curbside garbage from York Region annually. The facility operates 24 hours a day, seven days a week, with an average of 35 trucks arriving each day. Emissions are monitored on a continuous basis to ensure compliance with stringent Ontario Ministry of the Environment and Climate Change air quality standards and Environmental Compliance Approval limits. The Durham York Energy Centre reuses all process water generated within the facility and there is no discharge of process water to the municipal sanitary sewer system.





SM4RT LIVING INITIATIVES BY MUNICIPALITY

Local municipal partners play a vital role in the success of the SM4RT Living Plan through their support for pilot programs such as textile collection, swapping, backyard composting and other initiatives in their communities. The table below shows initiatives being offered as of Q2 2018.

MUNICIPALITY											
Town of Aurora		●	●	●		●	●	●	●		●
Town of East Gwillimbury		●				●		●			●
Town of Georgina		●				●	●	●			●
Township of King	●	●				●	●	●	●		●
City of Markham	●		●		●	●	●	●	●	●	
Town of Newmarket	●	●				●	●	●		●	●
Town of Richmond Hill		●		●	●	●	●	●		●	●
City of Vaughan	●	●		●	●	●	●	●	●	●	●
Town of Whitchurch-Stouffville		●				●	●	●	●	●	●



Repair Cafe



Backyard Composting program



Batteries/E-waste in multi-residential buildings



Composting demonstration sites



Development Standards



Good Food Promotion



Multi-residential outreach



Public Space Recycling



Textile bins, events and/or door-to-door collection



School programs

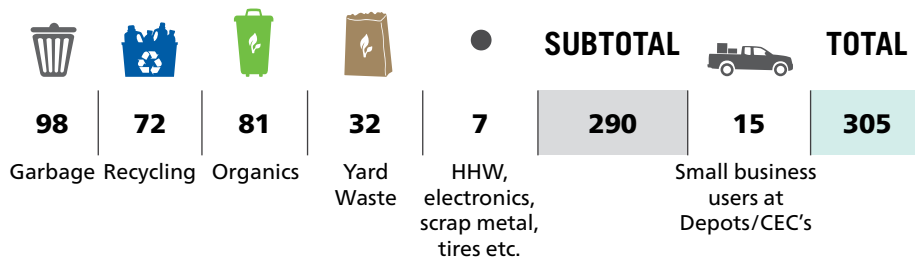


Swap events

WASTE MANAGEMENT PERFORMANCE

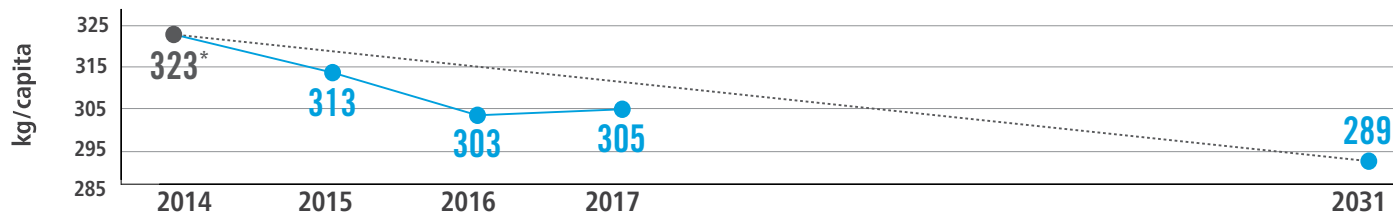


2017 York Region Waste Generation Rate (kg/capita)



	Garbage	Recycling	Organics	Yard Waste	HHW, electronics, scrap metal, tires etc.	SUBTOTAL	Small business users at Depots/CEC's	TOTAL
Town of Aurora	113	79	76	43	5	316	8	324
Town of East Gwillimbury	111	79	73	50	10	323	55	378
Town of Georgina	139	85	71	30	5	330	136	466
Township of King	107	92	85	43	4	331	6	337
City of Markham	64	70	88	29	6	257	5	262
Town of Newmarket	106	77	74	43	7	307	19	326
Town of Richmond Hill	127	72	77	31	9	316	14	330
City of Vaughan	103	67	80	29	6	285	7	292
Town of Whitchurch-Stouffville	112	73	84	33	5	307	10	317

Waste Generation rates 2014 to 2017



* Reconciled after 2014 reporting period with third party review

Waste stream trends 2014 to 2017

	2014	2015	2016	2017	Per cent change 2014 to 2017
Garbage	101	97	96	98	-3.0%
Recycling	78	73	70	72	-7.7%
Organics	83	83	82	81	-2.4%
Yard Waste	46	38	31	32	-30.4%
Business	9	15	17	15	+66.7%
Other	7	7	7	7	0.0%

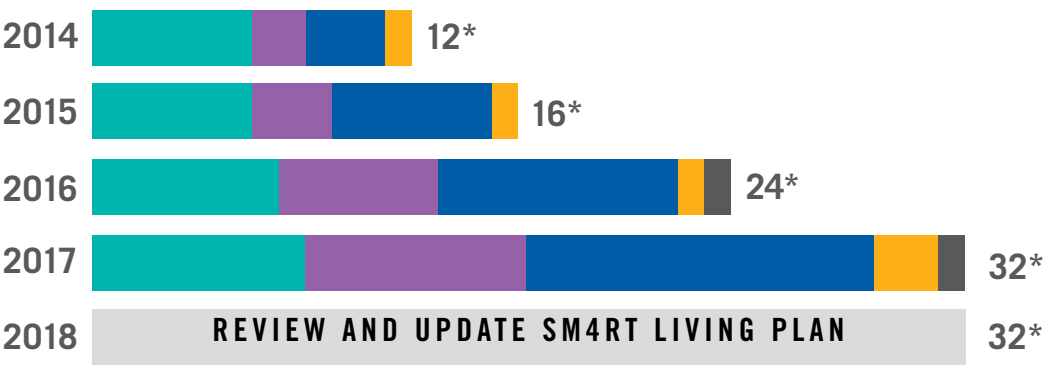
REVIEW AND UPDATE

The five year review and update of the SM4RT Living Plan will support the Region and its nine local municipal partners' commitment to lead sustainable and cost effective waste reduction and diversion solutions while accounting for impacts of the *Waste-Free Ontario Act* and strategy.

The scope of the review and update will include:

- Review of the SM4RT Living Plan strategies and initiatives
- Legislation review and scan including strategies for adapting to legislative change
- Emerging technologies and gap analysis including best practice review of similar municipalities
- Setting five year targets and updating long term projections
- Five year work plan prioritization
- Review of program communications
- Data gathering, monitoring performance measures and reporting recommendations

IMPLEMENTATION PROGRESS



*Number of initiatives underway





EARLY OBSERVATIONS

With the upcoming five year review and update of the SM4RT Living Plan, it is important to reflect on the challenges faced and successes achieved since the beginning of the plan.

LEADERSHIP

The initiatives were innovative with few local examples to look to for guidance.

INNOVATION TAKES TIME

Predicting hours needed for each initiative posed a challenge, and shifted focus to high-quality over high-quantity.

RESOURCE CONSIDERATIONS

Regional and local municipal staff face competing priorities for limited time and resources. Collaboration and leveraging existing work has been essential.

MEASURING SUCCESS

Each initiative is unique and indicators of success are not always comparable. Scaling up pilot results to assess potential long-term impact is complex.

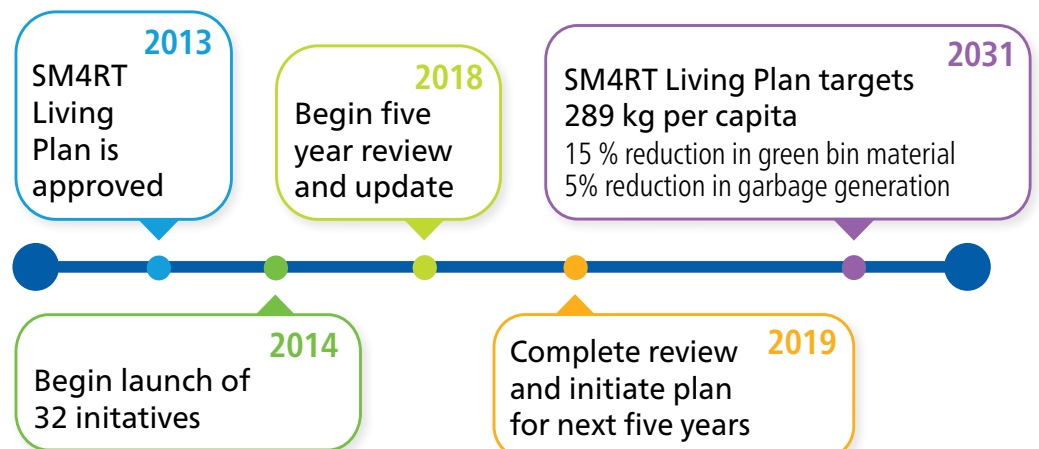
LEVERAGING COMMUNITY PARTNERS

Establishing partnerships to provide funding and support to community-based organizations has helped extend the reach of programs.

GO ABOVE AND BEYOND 'STATUS QUO'

Creating programs to reduce waste and decrease reliance on processing infrastructure takes time and consistent effort to build momentum.

TIMELINE



THE SINGLE MOST
IMPORTANT INFLUENCE
THAT CAN CHANGE OUR
ENVIRONMENTAL FUTURE
IS YOU

