



## MATERIAL PURCHASING AND WASTE MANAGEMENT BEHAVIORS

### Ann Arbor Carbon Neutrality Plan: Strategy 5

The City's carbon neutrality plan has six main strategies. Strategy 5 seeks to change the way we use, reuse, and dispose of materials. The goal is to change our relationship with what we buy and use, how we buy and use materials, and how we dispose of materials. To achieve this strategy, six specific actions are identified:

1. *Move Toward a Circular Economy*
2. *Expand Composting Program*
3. *Expand Commercial Recycling*
4. *Require Sustainable Materials in New and Existing Developments*
5. *Support a Plant Rich Diet*
6. *Enhance Refrigerant Recycling and Reuse Program*

### Transitioning from a linear to a circular economy

<p style="text-align: center;"><b>LINEAR ECONOMY</b></p> <p style="text-align: center;">TAKE      MAKE      DISPOSE</p> <p style="text-align: center;">ENERGY FROM FINITE SOURCES</p>	<p style="text-align: center;"><b>CIRCULAR ECONOMY</b></p> <p style="text-align: center;">REUSE      REMAKE      REFURBISH</p> <p style="text-align: center;">ENERGY FROM RENEWABLE SOURCES</p>	<p>The A2Zero plan is to move towards a <b>circular economy</b>, including actions to promote resource reduction, recycling, composting, sustainable purchasing, material reuse, and regeneration. This type of economy expands the availability of repair centers, tool lending libraries, reuse and thrift stores, curbside textile collection, and neighborhood sharing.</p> <p>The City will work with peer municipalities to create tools that allow for transparency, traceability, and the accurate calculation of embedded greenhouse gas emissions for different materials, goods, and services.</p>
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### Waste prevention

The City of Ann Arbor has an extensive, multi-model, and soon to expand waste management system. The best waste management behavior is to practice **source reduction**. This includes changing our purchasing and usage habits to **reduce** the overall amount of material we consume and thus the amount of waste produced. It includes expanding our reuse of materials, donations, or exchange of old for new items.

Included is the aggressive **reuse** of materials and, when making new purchases, to seek out items that are **minimally packaged**. We can also ask whether the packaging materials can be reused or recycled. It is always

best to use your own bags or containers in which to bring home purchases. There are reusable produce bags, washable fabric bags for bulk grocery items, as well as grocery totes available both in stores and online.

**Recycling**

Ann Arbor has one of the nation’s earliest community-wide recycling programs. It ran into difficulty a few years ago at its **Materials Recovery Facility (MRF)**. In November 2020, Recycle Ann Arbor signed a contract with the City to rebuild the *Ann Arbor Area Materials Recovery Facility* and begin processing materials by this coming November ([www.recycleannarbor.org/services-guide/materials-recovery-facility](http://www.recycleannarbor.org/services-guide/materials-recovery-facility)). During this coming summer a **new recycling program** will begin and a community-wide education program initiated to introduce the new program. For the time being, use the guidelines below.

YES - Accepted	NO – Not accepted
<ul style="list-style-type: none"> <li>● <b>Mixed paper</b> – newspapers, magazines, catalogs, junk mail, office paper, cardboard, frozen food and cereal-type boxes</li> <li>● <b>Metal cans</b></li> <li>● <b>Glass bottles and jars</b> – remove tops</li> <li>● <b>Cleaned plastic bottles, containers and tubs</b> – keep on screw caps, throw away flat plastic lids)</li> <li>● <b>Aseptic and Tetrapak cartons</b> – used for milk, juice, soymilk, broth, almond milk, etc.</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Plastic bags or film</b></li> <li>● <b>Styrofoam*</b></li> <li>● <b>#3/PVC plastic</b></li> <li>● <b>Biodegradable plastics</b> (marked PLA or BPI)</li> <li>● <b>Batteries &amp; Electronics</b></li> <li>● <b>Light bulbs</b></li> <li>● <b>Toxic materials such as motor oil</b></li> <li>● <b>Medical waste, syringes</b></li> <li>● <b>Hardcover books or shredded paper</b></li> <li>● <b>Ceramics or Pyrex dishes</b></li> <li>● <b>Textiles*</b></li> <li>● <b>Wood or construction debris</b></li> <li>● <b>Paper cups</b></li> <li>● <b>Yard trimmings or plate scrapings</b></li> </ul>

\*These items are accepted at the **Drop-Off Station** ([www.recycleannarbor.org/divisions/drop-off-station/about](http://www.recycleannarbor.org/divisions/drop-off-station/about)). See their website for restrictions and additional recycling details.

**Contamination**

Unfortunately, given the current extremely poor global market for recycled materials, **any** contamination in the recycling bins is a “deal breaker.” Contamination happens in a wide variety of ways. For instance, if some of the cardboard boxes get wet, either because they are left outside the recycling bins, or the bin covers are left ajar, then the entire load is often rejected and goes to the landfill. If cardboard boxes are wrapped with a plastic film or are coated, even if just on the bottom, then they are rejected. Food waste of any kind in the bins may cause the entire load to be sent to the landfill. Inclusion of the wrong type of plastic, or wax-coated paper cups, or shredded paper, or boxes not crushed, or... you get the idea. **ANY contamination turns the entire recycling bin into trash and results in it going to the landfill.** The coming education program will address the issue of contamination since it has been getting much worse over the last decade. Following the guidelines above is essential; our mistake may undermine the efforts of our neighbors. Thus, unfortunately, the City’s recycling program suggests, *“If in doubt, throw it out.”*

**Composting**

The City has a curbside pickup **yard and food waste composting program** ([www.a2gov.org/departments/trash-recycling/Pages/Compost.aspx](http://www.a2gov.org/departments/trash-recycling/Pages/Compost.aspx)). The pickup season runs from early April

until early December. The program collected and composts a wide range of materials including Plate scrapings and food waste (including meat and bones), bamboo dinnerware, grass clippings, leaves and brush, garden pruning, garden surplus, crab apples, and *BPI certified* compostable bags, containers, silverware, etc.

Unfortunately, the curbside pickup composting program is not yet available to multi-family dwellings in the City such as our Co-op. Our Co-op staff does collect garden and yard waste if placed in paper yard bags; these are then composted by the City at the facility located at 4170 Platt Road. This current Co-op arrangement does not currently allow for the pickup and composting of all the items listed above. In particular, no food waste is accepted.

The A2Zero Ambassadors program currently has a team exploring the expansion of multi-family food and yard waste composting. However, in the meantime, there are options available for food waste composting in some parts of our Co-op, including:

1. **Vermicomposting** – This process (worm composting) produces a rich organic soil amendment containing a diversity of plant nutrients and beneficial microorganisms. It is a useful process when backyard composting is not an option since it does divert food waste from the waste stream. Also, vermicomposting is a powerful educational tool for teaching children about decomposition, microbiology, earthworms and the importance of managing organic residuals such as food waste at home.

Building a worm bin is easy. An excellent guide is available at the Rodale Institute webpage ([rodaleinstitute.org/science/articles/vermicomposting-for-beginners/](http://rodaleinstitute.org/science/articles/vermicomposting-for-beginners/)). This institute also has “A Simple Guide to Vermicomposting” ([rodaleinstitute.org/education/resources/a-simple-guide-to-vermicomposting/](http://rodaleinstitute.org/education/resources/a-simple-guide-to-vermicomposting/)). When our children were younger we often had a worm bin in the basement for composting our yard waste. It was odorless, tidy, effective, and fun.

2. **Green Cone** – This is a unique and environmentally friendly way to compost food waste. The unit accepts all cooked and uncooked food waste including vegetable scraps, meat, fish, bones, dairy products and other organic material ([www.greenconeusa.com/green-cone-solar-food-waste-digester.html](http://www.greenconeusa.com/green-cone-solar-food-waste-digester.html)).



The Green Cone is sealed and composts below the soil surface thus eliminating odors. No regular care is required (e.g., no mixing the pile) and depending on the type and amount of food waste added, most of the material is absorbed into the soil. With heavy loading, the cone may need either to be emptied out every few years or left unused for an extended period. We have had one in our back yard for over 30 years, use it year-round, and with heavy use have to empty it out about every three years (i.e., putting the humus and some un-composted waste into shallow holes in our garden, which we cover with a layer of soil). The material is teeming with earthworms. Plants above these spots grow amazingly well. And we have almost no food waste in our trash bags.

## Reuse

Unfortunately, Recycle Ann Arbor made the tough decision to close permanently the **Reuse Center** located at 2420 S. Industrial Hwy. They are in the process of re-envisioning their role in reuse. In the meantime, here is the **Local Reuse Network**:

3. **Habitat for Humanity Restore**, 6241 Jackson Road, Ann Arbor, (734) 677-1558.
4. **The Share House**, 5161 Jackson Road, Ann Arbor, (734) 222-0876.
5. **Ann Arbor PTO**, 2280 S. Industrial Hwy, Ann Arbor, (734) 996-9155.
6. **Kiwanis Thrift**, 100 N. Staebler Road, Ann Arbor, (734) 665-0450.
7. **Ann Arbor Salvation Army**, 1621 S. State Street, Ann Arbor, (734) 332-3948.

## Other waste management services

1. **DROP OFF STATION SERVICES**: 2950 East Ellsworth Rd. Ann Arbor, MI 48108. Open 3 days a week: Tuesday & Thursday 8:30 am to 6:30 pm, Saturday 9 am to 6 pm.

**What's Accepted:** cardboard, boxboard, paper, plastic, glass, tires, metal, Freon appliances, wood, concrete, propane tanks and yard waste, soft plastics (plastic bags), hard plastics, Styrofoam, packing peanuts, bubble wrap, hard covered books, secure document shredding, secure hard drive shredding, light

bulbs, cooking oil, rechargeable and automotive batteries, shredded paper, motor oil & motor oil filters, antifreeze, textiles, electronic waste: CRT/FLAT TVs, CRT/FLAT monitors, CPUs, printers, laptops, misc. electronic devices, misc. cords. Drop Off Station site entrance fee \$3; other fees may also apply to specific materials. ([www.recycleannarbor.org/divisions/drop-off-station](http://www.recycleannarbor.org/divisions/drop-off-station))

2. **RECYCLE ANN ARBOR'S RECOVERY YARD:** 7891 Jackson Road Ann Arbor, MI 48103. Open 5 days a week: 7:30 am to 3:30 pm Monday through Friday; Closed Saturday and Sunday. The Recovery Yard is Michigan's only non-profit construction and demolition recycler, providing prompt and reliable service to southeast Michigan. ([www.recycleannarbor.org/divisions/recovery-yard/](http://www.recycleannarbor.org/divisions/recovery-yard/))

**What's Accepted:** paper, glass, plastic, cardboard, metal, wood, concrete, yard waste, Freon appliances, automotive oils, tires, general waste, including furniture, treated wood, and construction debris.

3. **WASHTENAW COUNTY SOLID WASTE DIVISION PROGRAMS:** Public Works / Solid Waste, 705 N Zeeb Rd., Ann Arbor, MI 48103. Phone: 734-222-6860. ([www.washtenaw.org/349/Waste-Reduction-Recycling](http://www.washtenaw.org/349/Waste-Reduction-Recycling))
  - a) **How to dispose of various materials:** ([www.washtenaw.org/278/How-Do-I-Dispose-Of](http://www.washtenaw.org/278/How-Do-I-Dispose-Of))
  - b) **Washtenaw County Solid Waste Plan:**  
([washtenaw.org/DocumentCenter/View/1306/Washtenaw-County-Solid-Waste-Management-Plan-2017-Amendment-PDF](http://washtenaw.org/DocumentCenter/View/1306/Washtenaw-County-Solid-Waste-Management-Plan-2017-Amendment-PDF))

### Links to webpages

The links referenced in this document are available at [tinyurl.com/A2Zero-SMN-URL](https://tinyurl.com/A2Zero-SMN-URL)

#### **A2Zero – Scarlett-Mitchell Neighborhood (SMN)**

Noreen De Young, A2Zero Climate Ambassador

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March 1, 2021