

The items listed below are for consideration and discussion, not final recommendations. The intent is for them to be vetted by stakeholders, municipalities and the public to identify the actions that will end up in the region's Climate Action and Adaptation Plan (CAAP).



SOLID WASTE

10/16/20

- ✦ *6% of the Centre Region's GHG emissions are solid waste related; 80% of the solid waste generated in the region is from commercial properties*
- ✦ *Co-Benefits: eliminating waste preserves resources and energy, reduced need for more landfills, social and racial equity (healthy food access), recycling and reuse industry supports local economy*
- ✦ **Projected Goal:** *Reduce waste sent to the landfill by x% or Zero waste by 2040 (CCRRA goal)*

1. Encourage reducing waste at the source in homes and businesses

A.1 Develop strategies to reduce food waste and hunger

- Evaluate opportunities for food rescue efforts to connect to hunger services
- Provide a kitchen best practices guide to help households and businesses reduce food waste and consumption.

B.1 Implement an education campaign for waste reduction strategies

- Partner with CCRRA, Penn State, school district and commercial entities, such as restaurants, grocery stores, and the food bank.
- Educate residents to reduce consumption of climate-intense food, products and services.

C.1 Develop guidelines, education and resources to shape the procurement policies of the commercial sector

- Have municipalities take the lead in sustainable procurement practices
- Develop cooperatives for purchasing sustainable materials (e.g. 100% recycled paper, takeout packaging, cleaning products)
- Interface with building construction to incentivize sustainable purchasing of products such as low carbon concrete and steel.

D.1 Promote better business practices to shift community's thinking; use zero waste as a promotional tool.

E.1 Interface with building construction to support more sustainable purchasing of products such as low carbon concrete and steel.

F.1 Determine opportunities for waste materials exchange and repair businesses; existing or creating new exchanges.

- Partner with non-profits on deconstruction

- Promote training and education around repairing items like appliances.
- G.1 Develop systems and infrastructure that promote and institutionalize reusable goods.
- H.1 Advocate for standardizing food labeling dates and educating the public

2. Increase diversion in homes and businesses

- A.2 Review/update/support CCRRA's strategic plan and develop a supporting Centre Region waste management strategy
- B.2 Increase recycling during construction and demolition projects
- Create a demolition debris and diversion ordinance so that it can be enforced, and it encourages further diversion and reuse of building materials.
 - Develop a building and renovation standard for governmental entities that includes waste minimization.
 - Incentivize waste minimization for building construction and demolition
- C.2 Develop programs and policy to increase recycling at commercial locations
- Update the solid waste & recycling ordinance to better address commercial locations with the intent to increase recycling diversion rates
 - Evaluate best strategies for increased participation including education and enforcement. Determine best methods of enforcement.
 - Create a multi-family recycling ordinance
 - Partner with CCRRA to perform a recycling audit of all business locations to identify opportunities and challenges
 - Consider benchmarking and reporting requirements
 - Develop a waste audit program for businesses to participate in to learn ways to increase their recycling rates
 - Determine ways to incentivize recycling for property owners
- D.2 Require design of new buildings to ensure space for proper recycling containers exist inside and outside of the property.
- E.2 Improve cardboard recycling with more drop off locations in Centre Region
- F.2 Consider an ordinance that requires all business recycle using CCRRA services – meaning all pay for services which could include red bin curbside, drop off, blue carts and larger multi-bin recycling containers, and cardboard recycling
- G.2 Municipal government and government entities lead in becoming low waste generators
- Define a model on how organizations can reduce waste and improve sustainability operations and purchases
 - Promote online citizen services (such as permitting and bill payment)

- Evaluate the use of low-carbon concrete and/or increased use of recycled aggregate in residential street construction and sidewalks.
 - Support refuse and recycling trucks continue to increase fuel efficiency and reduce their carbon fuel sources.
- H.2 Reduce organics going to the landfill
- Promote and possibly subsidize backyard and apartment composting bins
 - Determine feasibility and options for collection of organics, such as drop-off location(s) or cart collection
 - Develop market growth for increased compost at the region's compost facilities
 - Promote and support cooperative endeavors between institutional and commercial entities to seek alternatives for organic waste disposal
 - Support UAJA's study of the feasibility of anaerobic digestion in the region. System would look at wastewater treatment sludge and possibly food waste (for commercial and potentially residential).
- I.2 Promote solar panel recycling and advocate for federal and state level mandates for recycling.
- Europe in 2012 established rules for solar panel recycling through the Waste Electrical and Electronic Equipment (WEEE) Directive

3. Improve efficiencies of waste management

- A.3 Identify intersectional opportunities between solid waste, food production and energy.
- a. Determine feasibility of renewable natural gas from waste and/or agricultural waste to fuel heavy duty trucks/tractors
- B.3 Evaluate collection strategies to determine best practices
- a. Determine efficiency improvements by more collaboration with other municipalities
 - b. Strive towards bi-weekly garbage collection
- C.3 Improve efficiency in refuse collection, by promoting business owners in shopping centers share refuse and recycling services to eliminate 2-3 different trucks servicing the same area.
- D.3 Include transportation of goods in the next GHG emissions inventory to contain the entirety of the materials management sector.
- E.3 Build a GIS database to manage information for effective planning decisions.
- a. Track and manage waste generation, assets, containers, etc.
 - b. Link local manufacturers with neighbors. Leverage local supply chain
- F.3 Partner with the Greentree Landfill to ensure their methane capture system is performing at its most efficient use.



4. Support locally produced products

- A.4 Partner with nonprofit organizations to promote purchase of local food and products
- B.4 Evaluate resiliency of food supply chain (focus on local food). Look to involve farmers in local food supply.
- C.4 Expand community gardening
- D.4 Promote farmers markets
- E.4 Expand existing local food programs at community gardens, schools, and parks, such as by encouraging farms to work directly with organizations such as churches or schools to provide community-supported agriculture (CSA) programs.