

Circularity at scale: Facing and embracing complexity with PROs



Earth911[®]

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Earth911.com

Organic Confluences Conference

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Earth911.com: Expedia for the Circular Economy

Circular Economy Search

We're **expanding the largest recycling database**, which provides curbside, local transfer station, and private recycling and reuse options for hundreds of materials, to include **composting, repair, and other circular options** at <https://search.earth911.com>

Sustainable Living & How-to Guides

And thousands of sustainable living and recycling guide articles at <https://earth911.com>



Action Junk Removal OPEN >

Action Junk Removal Company
Action Junk Removal
Our goal is to help you get rid of the stuff that you do not need anymore.
ActionJunkRemoval.Services
OPEN

- QUICK SEARCH
- AUTOMOTIVE
 - BATTERIES
 - CONSTRUCTION
 - ELECTRONICS
 - GARDEN
 - GLASS
 - HAZARDOUS
 - HOUSEHOLD
 - METALS
 - PAINT
 - PAPER
 - PLASTIC

Do you provide recycling services?
User Name Password Go

or don't have an account? Create one now!

Firestone COMPLETE AUTO CARE
GET \$10 OFF

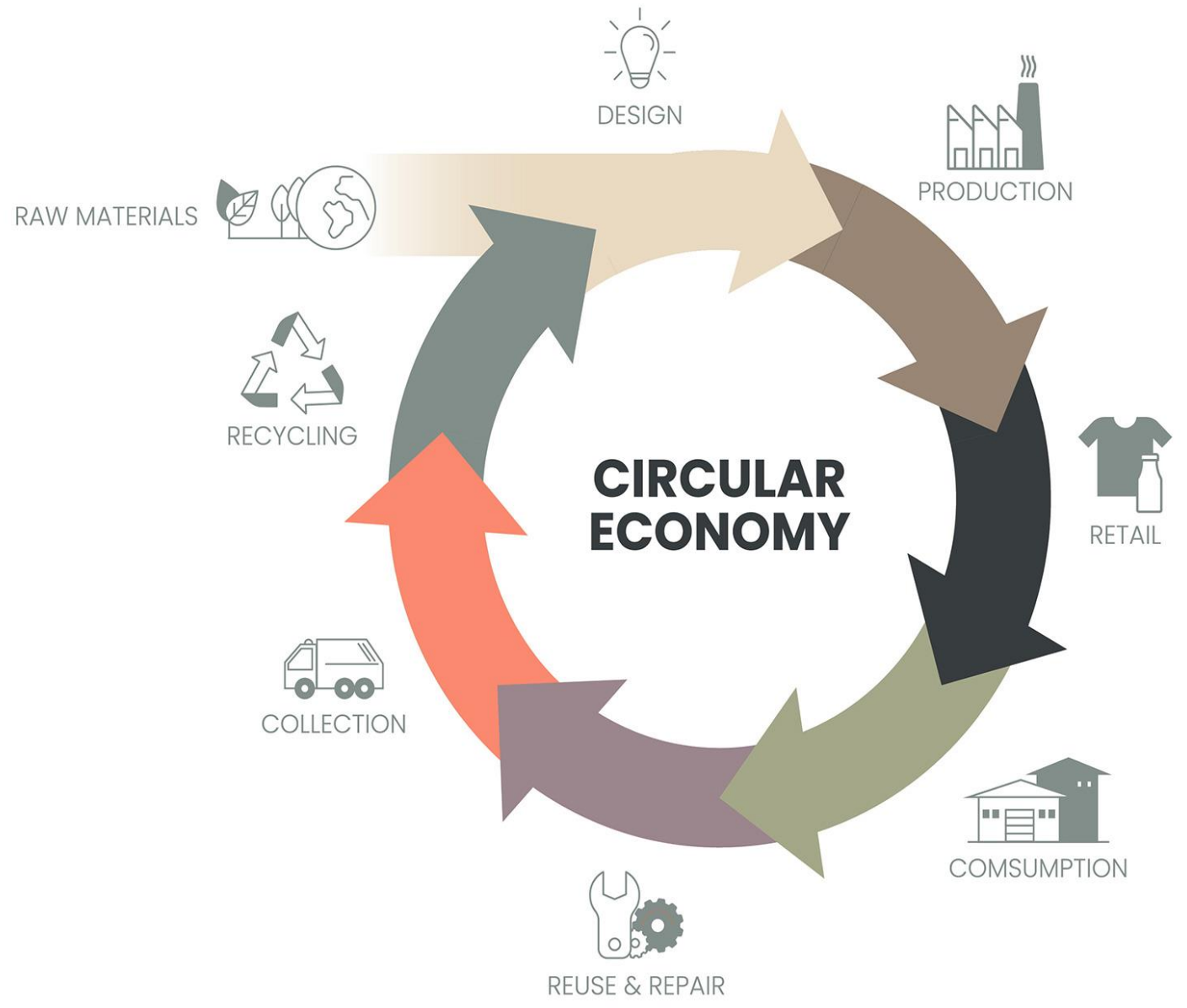
NEED HELP RECYCLING? SEARCH FOR A RECYCLING SOLUTION BELOW

SEARCH FOR ZIP CODE
CFLs, desktop computers, cell phones, etc... zip code SEARCH

WELCOME TO THE EARTH911 RECYCLING SEARCH!
With over 350 materials and 100,000+ listings, we maintain one of North America's most extensive recycling databases. Simply dial 1(800)CLEANUP, or simply enter in the material you are trying to recycle along with your zip code and click search.



The circular economy is described as a new monolithic process



The circular economy is a complex, nested and dynamic set of local and materials-centric economies...

While society is a hierarchical, industrial bureaucratized artifact

A federal regulatory umbrella that's full of holes

50 states and regulatory regimes

3,143 counties and fractional collection and processing markets

19,495 incorporated cities and villages with their own budgets and priorities

9,000+ municipal and county recycling programs

9,000+ public-private and private recycling programs

Serving 334 million people

And 8 million organized businesses

Including 3,635 \$1 billion or larger companies

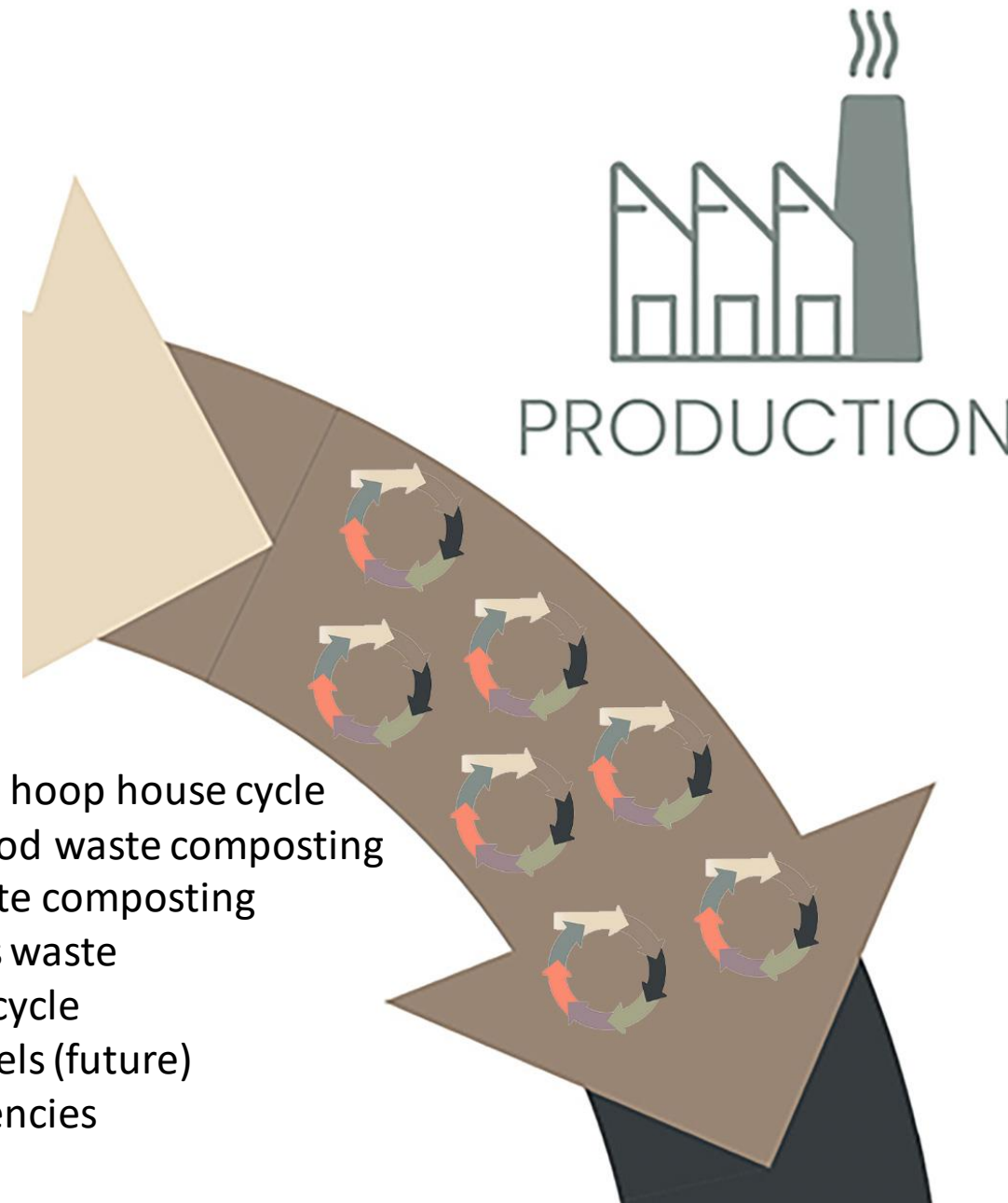
2,191 \$100 million to \$999 million companies

Of which only 20 contribute 35% of global emissions annually

There are many circular micro-economies within each industry and phase of production, consumption and reuse

Organic Agriculture's lifecycle includes

- Field sheeting cycle
- Mulch, drip tape and hoop house cycle
- Field and shipping food waste composting
- Production food waste composting
- Production materials waste
- Packaging materials cycle
- Transportation biofuels (future)
- And myriad dependencies



Extended Producer Responsibility laws provide a structure for making progress, the PRO



Circular materials collection, processing and distribution in 2032: Between \$255B and \$510B.



More than \$400B in play, in addition to today's \$117B scrap recycling industry.



Geographic- and materials-specific circular flows require public/private coordination, and the **producer responsibility organization (PRO)** is the basic organizing structure.



Producer Responsibility Organizations help manufacturers fulfill their legal obligations to recycle.



PROs operate independently but take full responsibility for recycling on behalf of participating companies.



We need a
PRO-positive
regulatory
environment

Enable flexible, multi-jurisdictional producer responsibility organizations, so that they can be organized without prior legislation.

Companies need to lead the way, not obstruct and obfuscate instead of innovating.

To do that, we need:

- Amendments to the Securities Act of 1933 and state Model Business Corporation Acts to provide easy multi-state PRO creation and funding models.
- Enable novel financing structures to provide ample capital for PRO formation, including incentives for achieving volume and quality milestones.
- Federal role: Set standards, measure, and inform.
- State role: Create incentives and subsidize infrastructure
- Local roles: Enable startup recycling solutions, especially in under-served communities.



Consumers aren't just ready for sustainability, they are eager for it

- **81%** of consumers say that if brands make it **easier to reuse or recycle** their products and packaging, they are **more likely to make a purchase***
- **89%** say companies/brands should do a lot more to reduce their carbon impact*
- **86%** say business should play a part in solving challenges like climate change or social justice*
- Products making ESG-related claims **averaged 28 percent cumulative growth** over the past five-year period, **versus 20 percent for products that made no such claims.**⁺

Sources:

* Wunderman Thompson [2021 Regeneration Rising survey](#) results.

+ McKinsey; [Customers care about sustainability—and back it up with their wallets](#)

Earth911 Can Help



We help companies, recyclers, and industry groups reach and inform consumers about how to recycle, compost, and reuse.



Are you interested in helping curate your local recycling services, to help your neighbors find more options?



Let's talk:
mitch@earth911.com



NEED HELP RECYCLING? SEARCH FOR A RECYCLING SOLUTION BELOW

SEARCH FOR

textiles

ZIP CODE

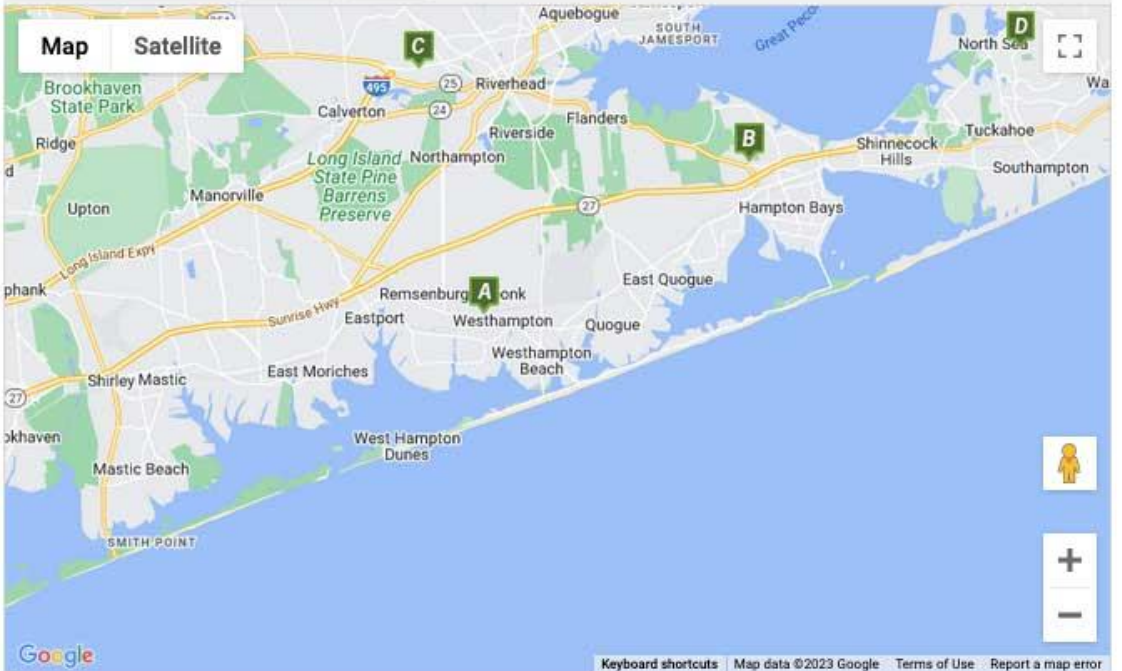
11978

SEARCH

Recycling centers for "textiles" near "11978"

Within: 25 miles

All Listings Map View Programs Mail-In



A Westhampton Recycling Center

(631) 288-5236
66 Old Country Rd
Westhampton, NY 11977

2.1 mi. Location

B Hampton Bays Recycling Center

(631) 728-5078
Jackson Ave
Hampton Bays, NY 11946

7 mi. Location

C The PUMA Store

(631) 905-0360
1947 Old Country Road
Riverhead, NY 11901

8.2 mi. Location

CLOSE

Get into the flow.

Learn.

Think.

Act.

Communicate.

Learn more.

Repeat.

Thank you!



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