



Department of  
Environmental  
Conservation

# **NYS Solid Waste Management Plan 2023-2032**

Focus on Construction Sector Waste



## 2023-2032

***“Building the  
Circular Economy  
through  
Sustainable  
Materials  
Management”***

## **SSWMP Vision and Themes**

### **DEC NYS Solid Waste Management Plan (SSWMP):**

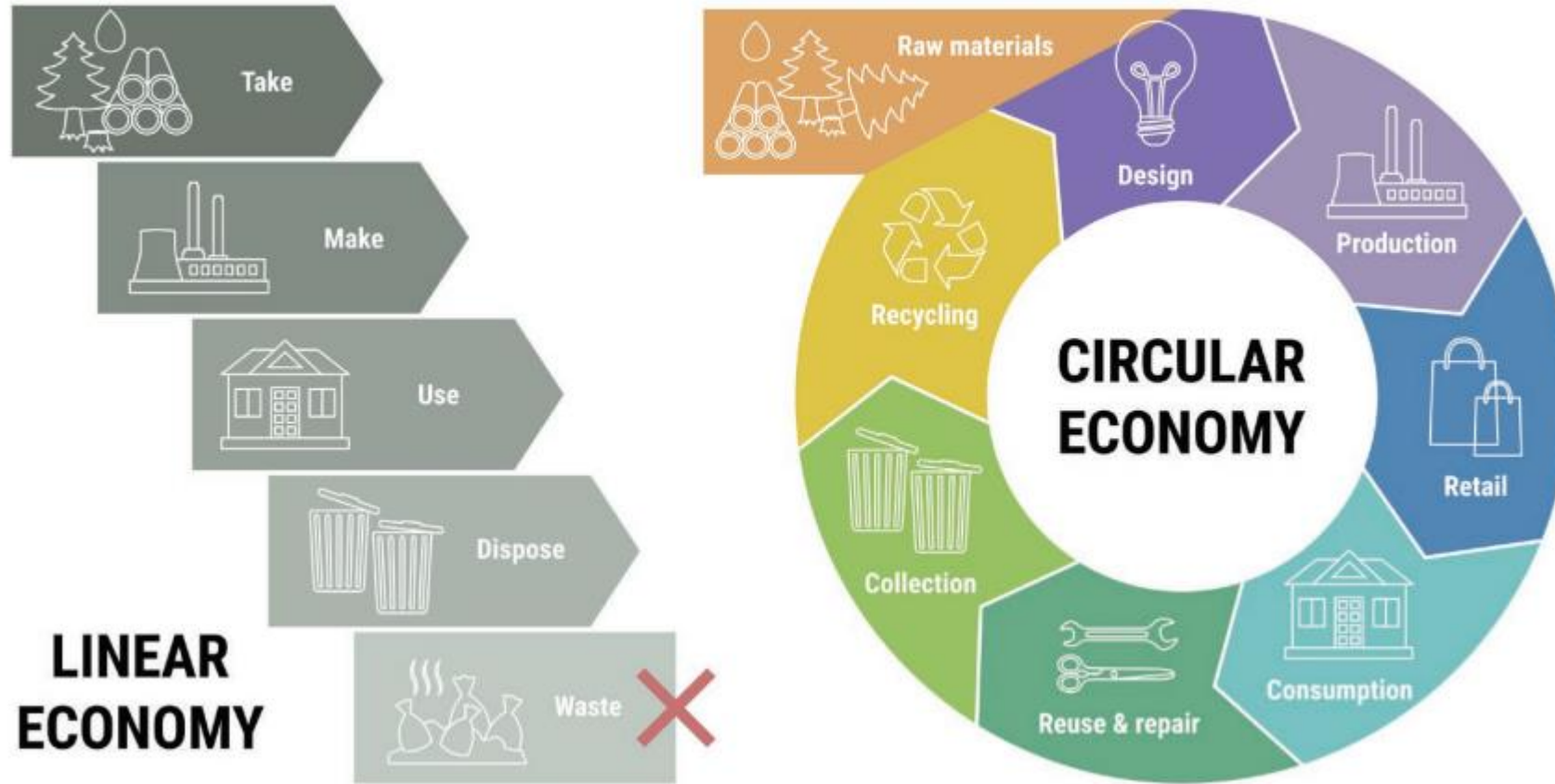
- By 2050 reduce waste to landfill and combustion by 85% (all waste streams including C&D debris);
- Realize the circular economy.
- Collaboration and innovation are commonplace
- “Waste” is a concept of the past

## **SSWMP Vision and Themes, Continued**

- Shared responsibility for waste management is a given.
- Climate change mitigation is fully implemented.\*
- Equitable, inclusive and accessible waste reduction and reuse efforts are widespread.
- Responsible and resilient markets thrive.

\*The SSWMP ties in recommendations for action from the December 2022 Scoping Plan for the NYS Climate Leadership & Community Protection Act (CLCPA) – Waste contributes to 12% of GHG

# What do we mean by the “Circular Economy”?



## SSWMP's "30,000-foot view" of C&D Debris...

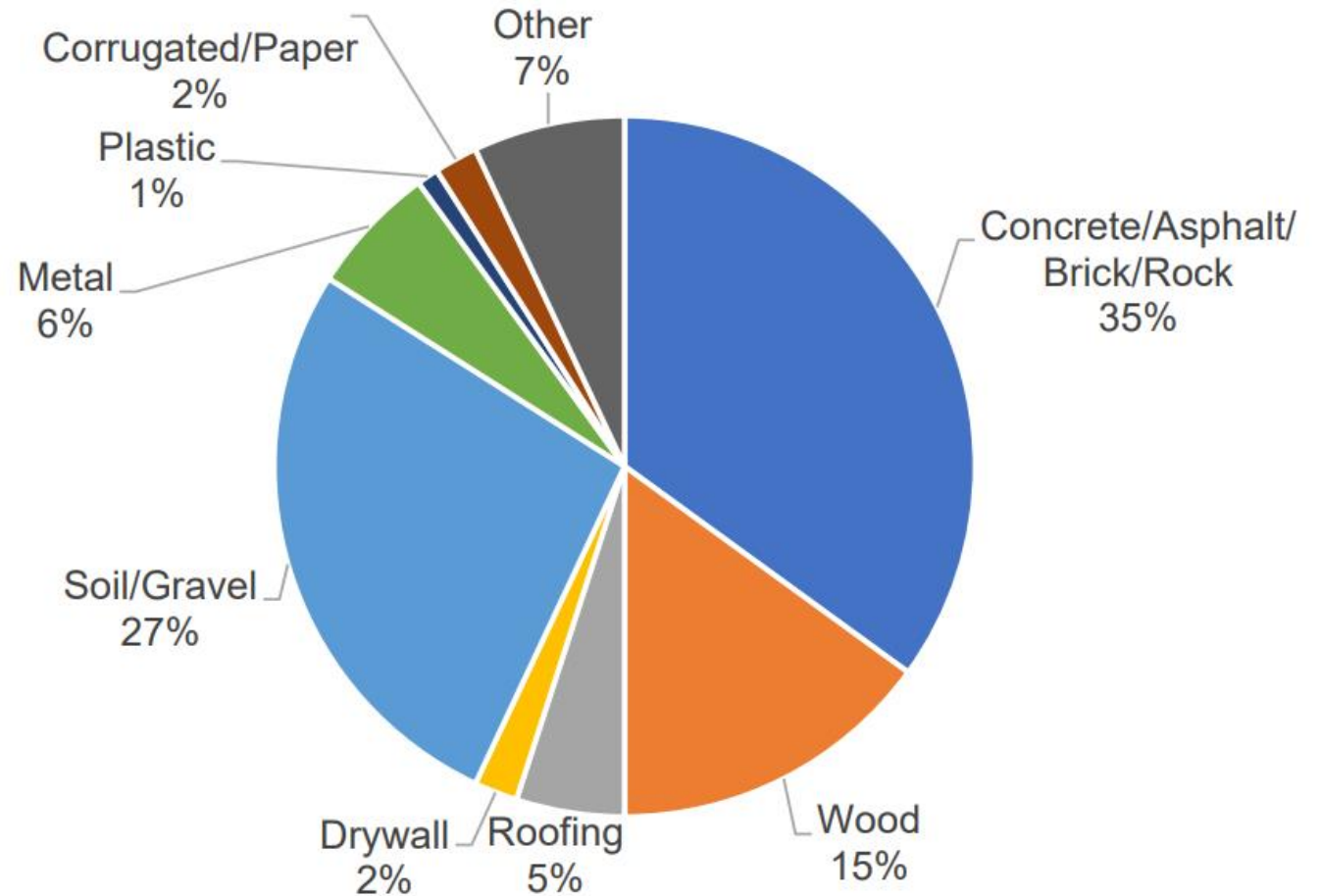
- **C&D Debris**, as one of the four major NYS waste stream components (together with **municipal solid waste**, **biosolids** and **industrial waste**) comprises the highest portion recycled: 46%
- C&D Debris recycling has INCREASED from **55%** in 2010 to **64%** in 2018. **Why?**
  - Focus on enforcement against illegal disposal;
  - Regulation changes in 2017;
  - Better data reporting;
  - *Building boom in NYC (?)*
- New York City (DEC Region 2) boasts the highest C&D debris regional recycling rate at **66%**
  - Recycling is necessary and profitable!

## C&D Debris: SSWMP Waste Profile

Total Quantity C&D  
Debris Generated in  
New York State in 2018:

**18.4 tons**

### C&D Debris Materials Composition



## C&D Debris: SSWMP Waste Profile

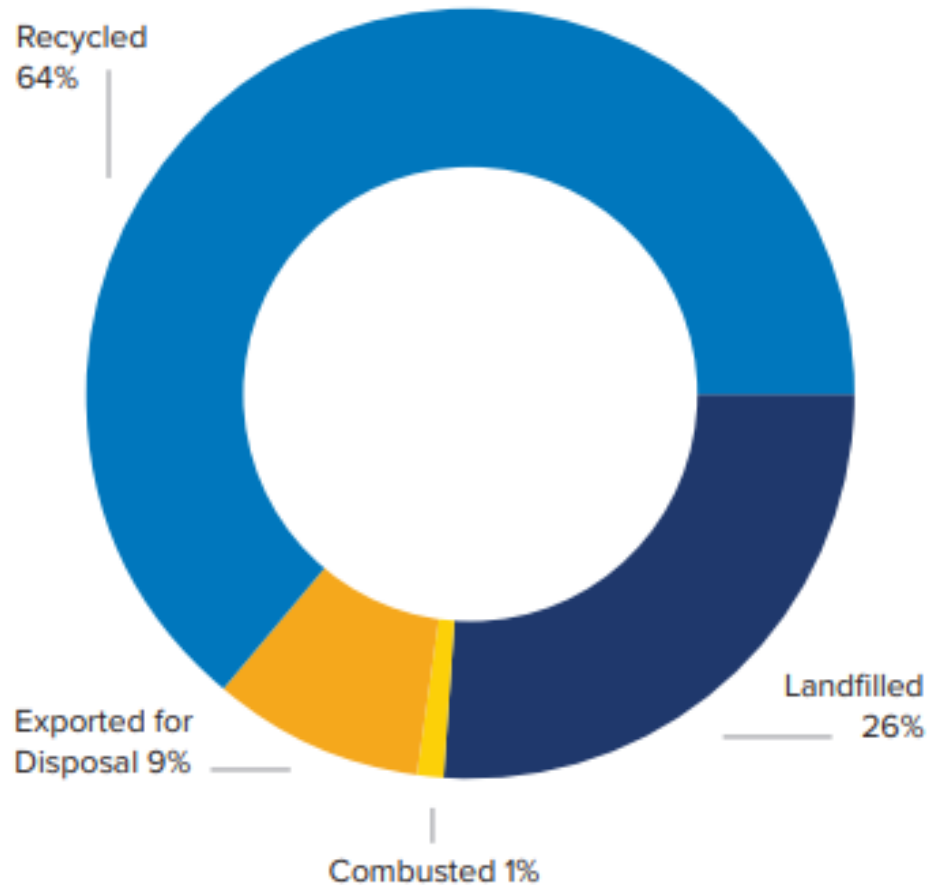


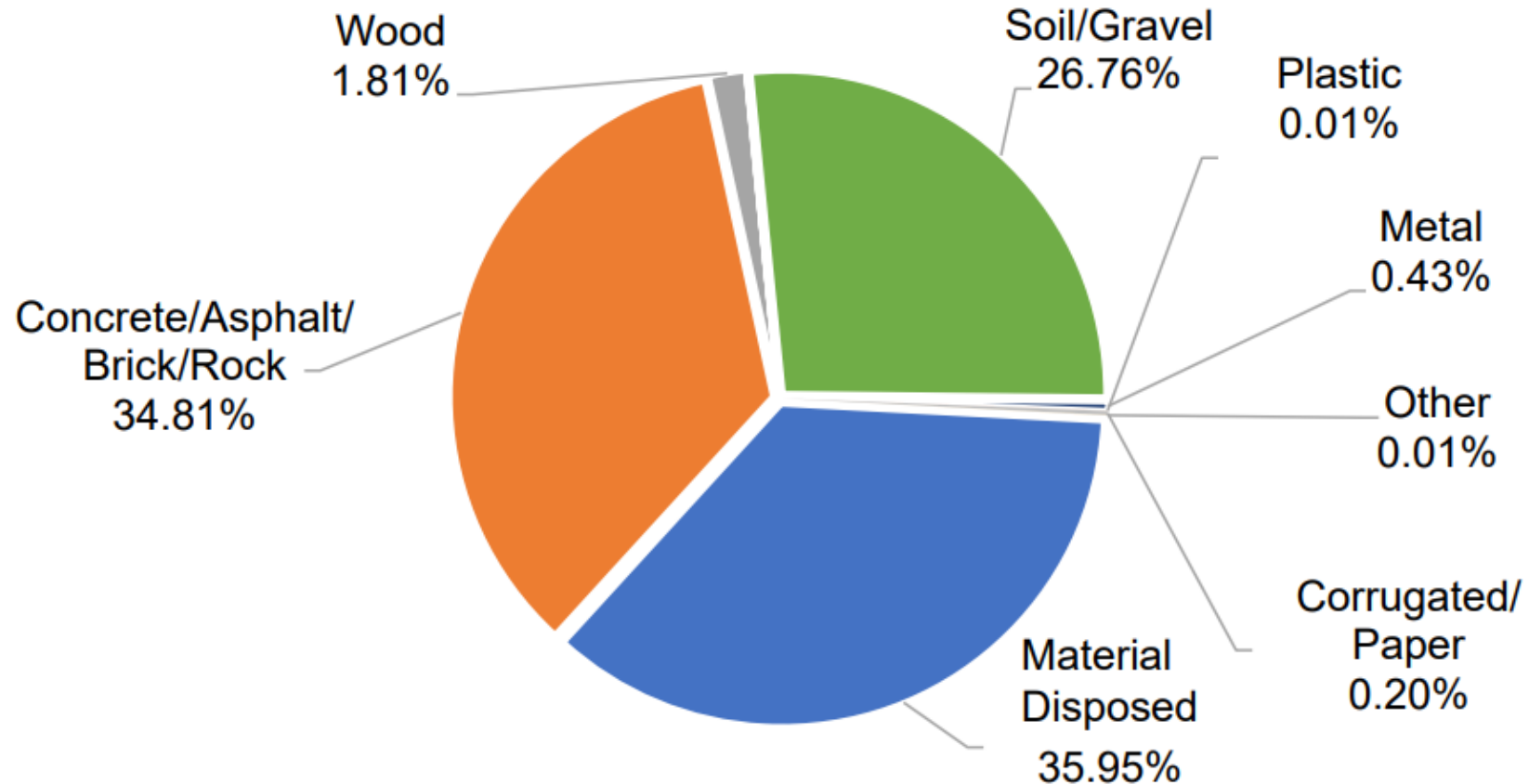
Figure 3.13. 2018 Management of C&D debris generated in New York State

The 64% C&D recycling data is skewed because of the weight aggregate and infrastructure recycling.

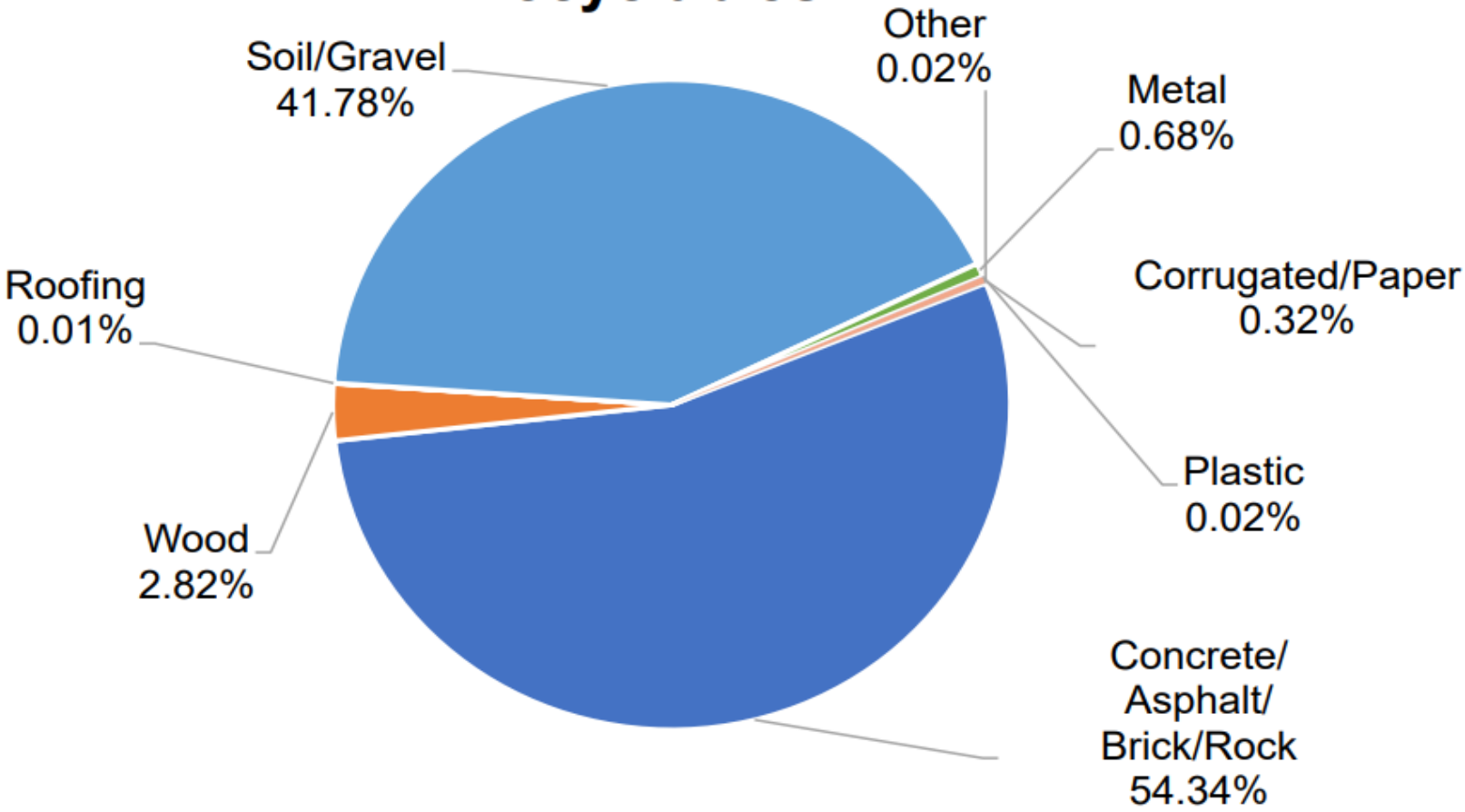
- There is still a large **volume** of materials that could be reused or recycled.

(DEC, 2023)

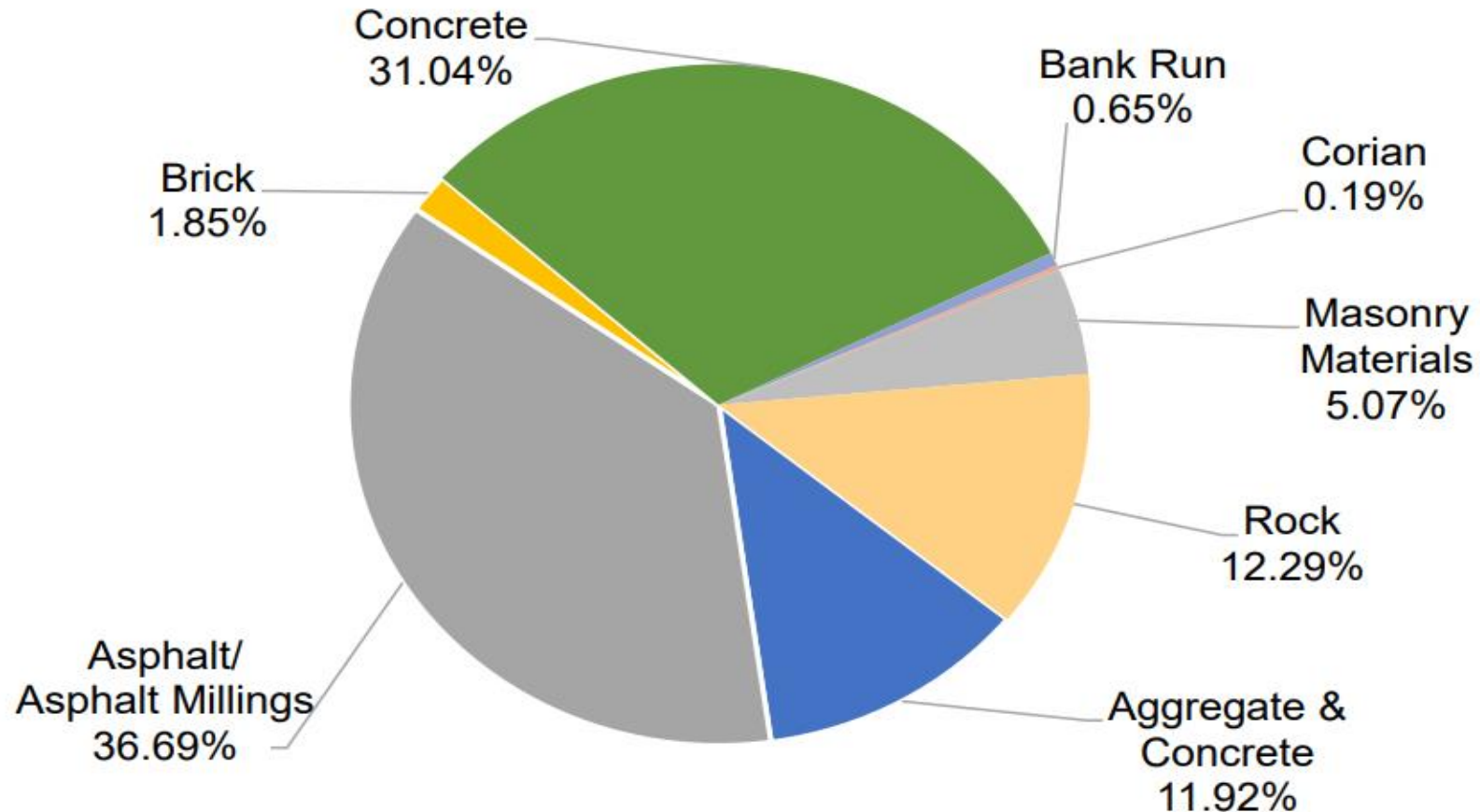
## 2018 Percent of Recyclables Recovered from C&D Debris Waste Stream



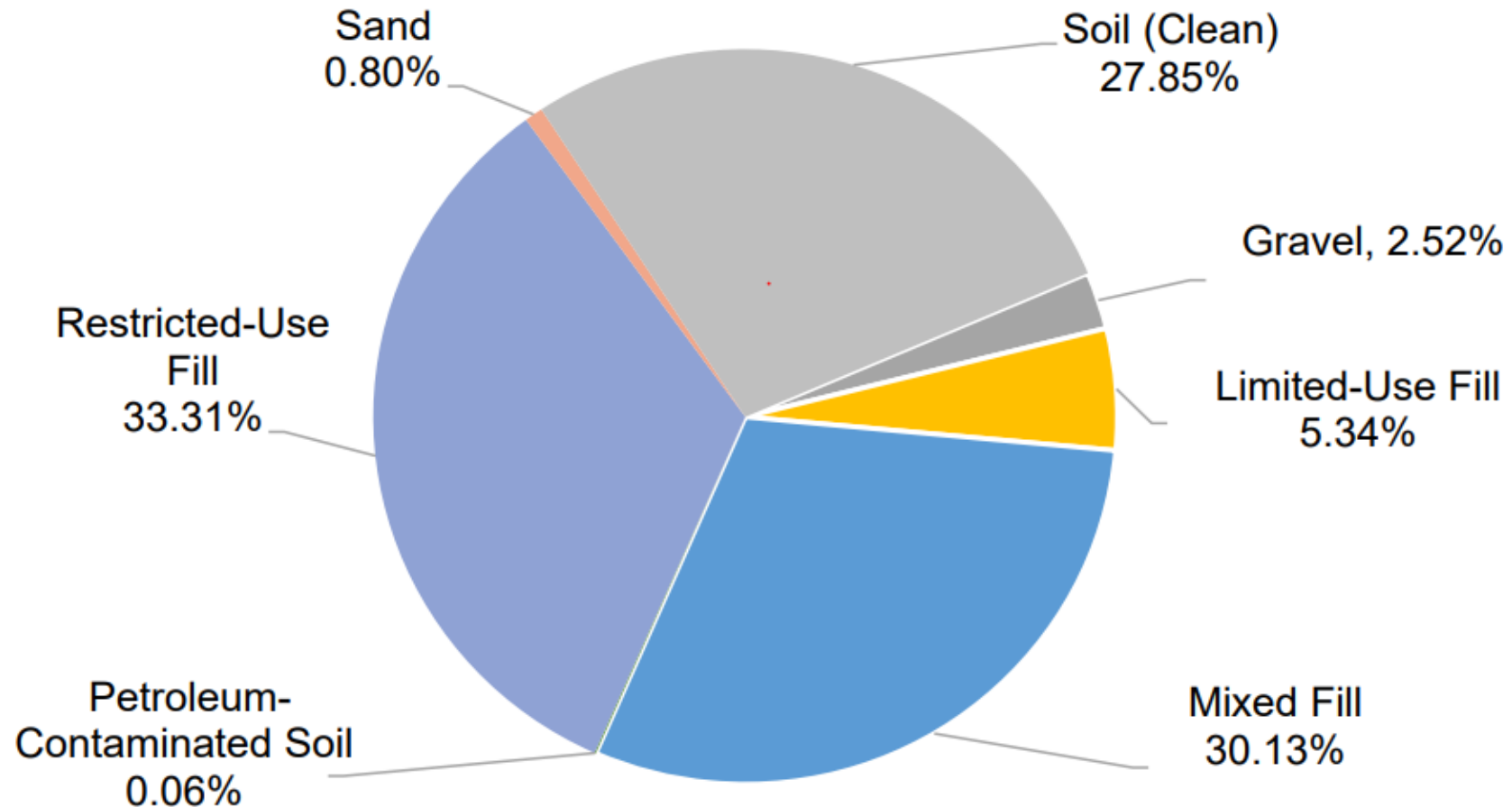
**2018 Composition of C&D Debris  
Recyclables**



## 2018 Composition of Concrete/Asphalt/Brick/Rock Stream



## 2018 Composition of Soil/Gravel Stream



## How does the SSWMP propose to attain its Vision?



# Who is responsible to implement SSWMP goals?

## ***Primarily:***

- Legislature (*33 out of 177 Action Items...*)
- DEC (through rulemaking, policies, data maintenance, and outreach)

## By working with the ***Stakeholders:***

- Other State Agencies
- Local Governments
- Academia
- Industry (manufacturing, construction, healthcare, farming, services)
- Organizations
- Public

## SSWMP FOCUS AREAS

- Waste Reduction and Reuse
- Recycling and Recycling Market Development and Resiliency
- Product Stewardship and Extended Producer Responsibility
- Organics Reduction and Recycling
- Toxics Reduction in Products
- Advanced Design and Operation of Solid Waste Management Facilities and Related Activities



## **SSWMP Goals to Increase Recycling of C&D Debris**

### FOCUS AREA 1: Waste Reduction and Reuse

GOAL 1.3.4: Work with academic partners engaging stakeholders to develop priorities and strategies to removing barriers to and incentivizing ***deconstruction*** and ***building materials reuse for their highest use.***

- Town + Gown
- Reuse of demolition drywall to make new drywall (vs. use on farm fields, as absorbent, etc.), glass into glass, roofing materials into same, etc...

## **SSWMP Goals to Increase Recycling of C&D Debris**

### **FOCUS AREA 2: Recycling and Recycling Market Development and Resiliency**

- Innovative processes to recycle components of C&D debris that we can't presently, such as drywall
  - Private companies – RD&D projects
  - SUNY research (DEC funded)
- NYS lead by example through “green procurement”

## **SSWMP Goals to Increase Recycling of C&D Debris**

### FOCUS AREA 3: Product Stewardship and Extended Producer Responsibility

- Carpet – happening now! Environmental Conservation Law (ECL) Article 27, Title 33 - <https://www.nysenate.gov/legislation/laws/ENV/A27T33>
- The “representative organization” still needs to be set up
- Possible EPR targets: End-of-life wind turbine blades, solar panels (Note panels are excluded from C&D debris...)

## **SSWMP Goals to Increase Recycling of C&D Debris**

### FOCUS AREA 4: Organics Reduction and Recycling

- Recovery and reuse of tree debris, wood debris
- Storm debris!

## **SSWMP Goals to Increase Recycling of C&D Debris**

### FOCUS AREA 5: Toxics Reduction in Products

- Essential to circular reuse of C&D Debris.
- Challenge of emerging contaminants: PFAS, 1,4-dioxane, microplastics
- **EXAMPLE:** State ban on “RT-12” coal-tar-based driveway sealer will greatly reduce carcinogenic PAHs in reclaimed asphalt pavement (RAP, aka “millings”)

## **SSWMP Goals to Increase Recycling of C&D Debris**

### **FOCUS AREA 6: Advanced Design and Operation of Solid Waste Management Facilities and Related Activities**

GOAL 6.1: ***Maintain*** (*amending as needed*) regulations governing design and operation of **C&D Debris Handling and Recovery Facilities (CDDHRFs)** to ensure protection of public health and environmental resources

- Fold in greenhouse gas reduction measures
- Increase recovery and recycling
- Revive or expand recycling of streams such as roofing materials, “hydrovacking” cuttings, etc.
- Facilitate building deconstruction, source-separation

## **SSWMP Goals to Increase Recycling of C&D Debris**

GOAL 6.2: Encourage increased reuse of C&D debris, including excavated material

- Increase reporting of C&D debris reuse to pinpoint opportunities
- Town + Gown's FOIL of DEC C&D Debris Tracking Forms - creating visual representations of material trips

GOAL 6.7: Improved Data Collection and Analysis related to C&D Debris

- DEC must develop web-based reporting to harmonize how data are reported by facilities, and make it easier to extract data!

## **SSWMP Action Items for C&D Debris – Broad Brush...**

- Expand markets for difficult-to-recycle C&D components...such as drywall and glass
- Encourage reuse hubs
- Building deconstruction
- Beneficial use determinations
- Recycling Education
- Better Data Collection
- Enforcement

## Building Deconstruction Vs Demolition

- Building demolition accounts for 18% of NYS waste
- 90% of building materials can be recovered
- \$3.05 billion in potential economic impact
  - Job creation
  - Building material resale



(Heisel, 2024)

## Citations and Helpful Links

*New York State Solid Waste Management Plan: Building the Circular Economy Through Sustainable Materials Management (2023–2032)*. December 27, 2023.

<https://dec.ny.gov/environmental-protection/waste-management/solid-waste-management-planning/nys>

Heisel, Felix, Jennifer Minner, Wyeth Augustine-Marceil, Diane Cohen, and Gretchen Worth, editors. *Constructing a Circular Economy in New York State: Deconstruction and Building Material Reuse*. Cornell Circular Construction Lab, Cornell Just Places Lab, and CR0WD, 2024.

[https://download.deconstruction.info/NYS\\_Deconstruction\\_WhitePaper-241003.pdf](https://download.deconstruction.info/NYS_Deconstruction_WhitePaper-241003.pdf)

Climate Leadership and Community Protection Act *Scoping Plan* (December 19, 2022).

<https://climate.ny.gov/resources/scoping-plan/>

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