

Goal:

Develop a solid waste management plan and nutrient management plan, which maximizes the investment of government funds in public infrastructure and facilities in the most efficient way possible.



COMPOSTING AND RECYCLING

While considering the scope of capital and facilities requirements to foster economic development, it would be remiss to not identify the important role of composting and recycling of agricultural, municipal, residential and industrial wastes.

Principles on Which the Goals are Based

The *primary index* used for resource conservation is usually the *number of tons* of material that can be diverted from a waste stream or landfill. Secondary output measures include: (1) The market value of the products diverted; (2) The cost efficiency of the recovery of the material; (3) The cost or savings to the industry associated with the waste management practice; and (4) landfill capacity preserved.

The municipal and industrial recycling programs depend on a landfill or solid waste system to accommodate the percentage of material that cannot be captured. Agricultural and food processing sectors depend on the ability to apply raw composted wastes to land.



Both of these ultimate disposal options are finite in their capacity. The solid waste management plan and nutrient management plan will need to identify the capacities available to assure success. A secondary market report for recycling products should be created, posted and maintained as a service to industry and agriculture. An informed legislative/decision making body will remain crucial to leading timely management decisions for the future design of innovative waste management programs.



Policy Area III Infrastructure

Goal:

Develop a solid waste management plan and nutrient management plan, which maximizes the investment of government funds in public infrastructure and facilities in the most efficient way possible.

STRATEGY 3.4

Implement composting and recycling in agriculture that successfully and affordably accommodates farm waste and disposal needs on fewer acres.

Timeframe

SHORT TERM

INTERMEDIATE

LONG TERM

Steps	Leadership Role (C/M/P)	Status (A/P/C)
Provide technical and financial assistance to integrate composting into as many CAFO / Non CAFO farming operations as is practical.	C/P	
Evaluate the composition of material, labor, space and resources available at each operation in order to design the ideal system on each farm.	P	
Seek out and apply for program funding on behalf of individual farms for waste management equipment.	C/P	
Create “market driven” funding strategies for the high-value farm wastes.	C/P	
Determine where collective waste management is practical and transportation is affordable, for more than one farm to compost together.	C/P	



Leadership Role: C – County M – Municipality P – Partners
Status: A – Active P – Pending C – Complete

Resources

Documents

- ◆ **“Composting Challenges and Solutions in New York State”**, Cornell Waste Management Institute.
- ◆ **Everything you Have Always wanted to Know About Home Composting**. New York State Department of Environmental Conservation.
- ◆ **Agricultural Composting: A Feasibility Study for New York Farms**. Eileen E. Fabian, Tom L. Richard, David Kay, David Allee, Joe Regenstein. February 1993
- ◆ **British Columbia Agricultural Composting Handbook**. Ministry of Agriculture and Food. September 1998.

Organizations and Programs

- ◆ **NYS Department of Environmental Conservation Division of Solid and Hazardous Materials** - www.dec.state.ny.us/website/dshm/index.html
Seeks to protect New York State's environment and the health of its citizens through innovative, rational, and reasonable management of solid and hazardous materials that secures public confidence and provides for sustainable economic development that is responsive to environmental concerns.
- ◆ **Cornell Waste Management Institute** - cwmi.css.cornell.edu
This institute addresses the environmental and social issues associated with waste management by focusing University resources and capabilities on this pressing economic, environmental and political issue.

Other

- ◆ NYSDEC Waste Reduction, Reuse and Recycling Pamphlets Informational Material Links - www.dec.state.ny.us/website/dshm/redrecy/order.htm

Policy Area III Infrastructure

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STRATEGY 3.5

Foster the development of waste-to-energy technologies

Timeframe

SHORT TERM

INTERMEDIATE

LONG TERM

Steps	Leadership Role (C/M/P)	Status (A/P/C)
Inventory the spectrum of wastes currently produced and identify opportunities for waste-to-energy	C/M	
Categorize wastes that are practical for anaerobic digestion and locate practical sites for a methane generating facility.	C	
Determine possibility of bio-hazards where a shared-use facility may be proposed.	C	
Seek and secure funding for pilot waste-to-energy facilities that are determined to be feasible.	C	
Explore the possibility of involving a private business to create energy while handling the waste from farmers.	C/P	



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Resources

Documents

- ◆ **Fact Sheet 6 - What is Waste to Energy?**
- ◆ **Waste-To-Energy: Recycling and Waste-to-Energy: The Ongoing Compatibility Success Story.** J.V.L. Kiser.
- ◆ **New York State Solid Waste Management Plan.** 1999-2000 Update. NYSDEC.

Organizations and Programs

- ◆ **Integrated Waste Services Association** - www.wte.org
The Integrated Waste Services Association (IWSA) was formed in 1991 to promote integrated solutions to municipal solid waste management problems. Within this capacity, IWSA strives to encourage the use of waste-to-energy technology as a key component of community solid waste programs.
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STRATEGY 3.6

Implement composting and recycling in industry to convert solid wastes into a beneficial product.

Timeframe

SHORT TERM
INTERMEDIATE
LONG TERM

Steps	Leadership Role (C/M/P)	Status (A/P/C)
Conduct cost/benefit analysis on wastes currently generated or anticipated to be generated from industries	C	
Determine the suitability of wastes for re-use and possible values of captured product.	C	
Obtain the current waste handling costs from industries and determine where these costs are affecting the ability of the industry to compete.	C	
Integrate transportation and logistics into the analysis of cost/benefit studies.	C	
Research feasibility of composting, land application or direct marketing of these wastes.	C/M	
Explore funding and technical assistance programs available to assist priority industries.	C/M	



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Resources

Documents

- ◆ **New York State Solid Waste Management Plan.** 1999-2000 Update. NYSDEC.
- ◆ **The New York State Recycling Bulletin.** 1999 Edition
- ◆ **Fact Sheet 1: Easy Backyard Composting**
- ◆ **Fact Sheet 2: Leave it on the Lawn (Grass Recycling)**
- ◆ **Fact Sheet 3: Practical Source Reduction Tips**
- ◆ **Waste Reduction, Reuse, Recycling, Composting and Buy Recycled Handbook for State Agencies**
- ◆ **“Packaging Waste: Whose Responsibility is It Anyway? A Final Report”** Cornell Waste Management Institute, April 1999.

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Policy Area III Infrastructure

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STRATEGY 3.7

Convert liquid wastes produced by industry into a beneficial product.

Timeframe

SHORT TERM

INTERMEDIATE

LONG TERM

Steps	Leadership Role (C/M/P)	Status (A/P/C)
Identify practical solutions to divert the valued components of a waste stream	C	
Determine the beneficial use and toxicity of components within a liquid waste.	C	
Identify methods of separating, digesting, mixing or solidifying the wastes.	C	
Identify the industries that have the greatest potential for conversion and that are utilizing needed capacities at municipal treatment plants.	C/P	
Explore funding and technical assistance programs available to assist priority industries.	C/P	



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Resources

Documents

- ◆ **Fact Sheet 4: Landfill Environmental Containment System Components**
- ◆ **Fact Sheet 5: Liquid Waste Management Plan**
- ◆ **“Investigation of Alleged Health Incidents Associated with Land Application of Sewage Sludges”**. New Solutions, Vol. 12(4) 387-408, 2002.
- ◆ **“The Role of Municipalities in Regulating the Land Application of Sewage Sludges and Septage”** Natural Resources Journal, V. 41, 1-47, 2001.

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