Annual Report for Fiscal Year 2024

(July 1, 2023 – June 30, 2024)







Building Missouri Business

Introduction

Administration

In 1990, the Missouri General Assembly directed the Environmental Improvement and Energy Resources Authority (EIERA) to establish the Missouri Market Development Program to promote the development and maintenance of markets for recovered materials. EIERA is a quasi-governmental agency with a Governor appointed bi-partisan board that serves as the financing arm of the Department of Natural Resources. EIERA was selected to house the Missouri Market Development Program to bridge economic development and environmental interests.

Purpose

The Missouri Market Development Program promotes the development and maintenance of markets for recovered materials and recycled content products throughout Missouri by providing: financial incentives, technical assistance and informational services to businesses, governments and other organizations.

Recycling market development helps to ensure that recycling will expand its role in a sustainable Missouri economy, create jobs, conserve resources, contribute to a quality environment, and reduce reliance on Missouri's landfills for disposal of solid waste.

Funding

To implement this statewide effort, the Missouri Market Development Program was allocated \$800,000 from Missouri's Solid Waste Management Fund in Fiscal Year 2024.

Recycling market development is working!

In Fiscal Year 2024, the Missouri Market Development Program's new investment in 3 Missouri recycling businesses and continued management of 10 active projects provided the following benefits to our economy and the environment:

- Leveraged over \$12.5 million in total investment
- Created 81 new Missouri jobs
- Diverted more than 124,000 tons annually from Missouri landfills
- The avoided disposal costs for the materials used in these projects totals nearly \$5.4 million each year





Developing Markets Through Cooperation

Partners

The cooperation and assistance of several agencies and organizations have been instrumental in the success of the Missouri Market Development Program.

Department of Economic Development

During the fiscal year, the Missouri Market Development Program continued its working relationship with the Department of Economic Development (DED) in support of program objectives. The Missouri Market Development Program and DED coordinate direct assistance to businesses to improve sales and purchases of Missouri products made from recyclable materials.

Department of Natural Resources

The Missouri Market Development Program works closely with the Department of Natural Resources (DNR) in its administration of the Solid Waste Management Fund, and the Waste Management Program's waste reduction and recycling efforts. The Missouri Market Development Program coordinates priorities and evaluation of activities with the Waste Management Program.

Office of Administration

The Missouri Market Development Program, in cooperation with the Office of Administration (OA), promotes recycling in state agencies. The Missouri Market Development Program works with OA on the Missouri Interagency Recycling Council and in developing the annual State of Missouri Recycling and Waste Reduction Report.

Solid Waste Advisory Board

The Missouri Market Development Program provides updates on its activities to the Solid Waste Advisory Board (SWAB). The SWAB Board is made up of the chairperson of each of the 20 Solid Waste Management Districts, three citizen representatives and two representatives of the solid waste management industry. The Solid Waste Advisory Board chair also serves on the Missouri Market Development Program Steering Committee.

Missouri Market Development Program Steering Committee

Stafffrom the EIERA, DED and DNR's Waste Management Program comprise the interdepartmental Market Development Program Steering Committee. The Solid Waste Advisory Board chair is a permanent steering committee member. The steering committee evaluates financial assistance applications and technical assistance proposals submitted to the Missouri Market Development Program and makes funding recommendations to the EIERA board.





Developing Markets Through Cooperation

Partners (continued)

Missouri Recycling Association

Missouri Market Development Program staff are actively involved in the activities of the Missouri Recycling Association, Missouri's only collective voice for recycling, waste reduction and sustainability issues.

Missouri Waste Control Coalition

The Missouri Market Development Program supports the efforts of the Missouri Waste Control Coalition by participating and supporting their annual conference in addition to staff serving on their advisory board.

Missouri Product Stewardship Council

Missouri Market Development Program staff are on the Executive Committee for the Missouri Product Stewardship Council, a coalition of local governments, businesses and other stakeholders that aim to reduce waste, increase re-use and recycling, save local governments money, and support jobs. The Council takes a product stewardship approach, which seeks to share responsibility with product manufacturers and creates accountability for managing waste, particularly at the post-consumer state. The Product Stewardship Institute (PSI) helped establish the Mo. Product Stewardship Council and serves as its coordinator.





Business Assistance

FY 2024 Update

Market Development Program Supports Missouri Businesses

The Missouri Market Development Program supports both larger and smaller-scale projects. Thanks to the program, Printerior, LLC in St. Louis can not only increase its 3D printing projects in size and scope but also do so at an accelerated rate as they continue to revolutionize the industrial tooling and mold making process in a sustainable manner by using recycled materials. The tangible results of these economic and environmental impacts can be seen in the 13 new jobs created by the Service Recycling Project in Joplin, and the 30,000 tons of additional wood waste that will be diverted from landfills by the St. Louis Composting Biochar project.

Fiscal Year 2024 Financial Assistance

The Missouri Market Development Program's financial assistance is targeted toward developing and expanding manufacturing capacity in Missouri by assisting businesses with the purchase of equipment needed to enable manufacturing facilities to use recovered materials. Financial assistance applicants to the Missouri Market Development Program may seek eligibility to request up to \$250,000 toward the purchase of specific equipment needed to manufacture a product from recovered materials or to process materials so that they can be used as manufacturing feedstock.

Applications are assigned points in the categories of job creation, annual diversion, and the cash match provided by the applicant. Increasing amounts of assistance are available as points scored by an application increase. If the application addresses a Missouri Market Development Program target waste stream, additional points are added to the total. These targeted waste streams identified include: construction and demolition waste, food waste and organics, or plastics.

Location in a minimally funded Missouri Solid Waste Management District will also earn additional points. (A list of these districts is available at MMDP Solid Waste Management Districts.pdf.)

Any award requires a cash match of at least 25 percent of the cost of the equipment, and a 100 percent cash match is required to receive the maximum award.

Additional Activities

In addition to the financial assistance offered to Missouri business, the Missouri Market Development Program continues to assist businesses with locating and procuring recyclable feedstocks and end markets for their recycled-content products.





Business Assistance

FY 2024 Projects

Printerior LLC-St. Louis

Printerior LLC, located in St. Louis, was awarded \$67,400 to purchase large format 3D printing equipment costing \$115,107. The use of 3D printers with recycled source material has an opportunity to turn a normally huge waste producing process into a sustainable circular system.

Printerior has developed a large format printing technique that is optimized for using recycled materials that can help revolutionize the way industrial tooling and mold making happens. Utilizing the 3D printing process makes it possible to create more intricate shapes, with less materials, and on a significantly faster timeline.

Several types of recycled plastic and glass fibers are utilized to print its products including recovered post- consumer PETG, PP, PLA, and ABS from local companies, hobbyists, and educational institutions.

Printerior also sells the recycled filament they create to other companies, thus creating demand for their recycled content products.

Printerior anticipates diverting an additional 30 tons annually from the waste stream and creating four positions with this project.

Service Recycling, LLC-Joplin

Service Recycling LLC, located in Joplin, was awarded \$225,500 to purchase a robotic pallet recovery system costing \$451,594. This machine will enable the company to more efficiently disassemble and cut odd size, custom, and broken pallets to be reassembled into new standard size pallets or custom pallets.

Service Recycling is a major commercial recycler in the Joplin area and processes materials recovered from Missouri, Oklahoma, Arkansas, and Iowa. They process scrap and waste materials (i.e. paper and other fiber materials, plastics, cardboard, pallets, etc.) from many major grocers and manufacturing plants such as Tyson Foods.

The automated robotic pallet recovery system will allow damaged pallets and block pallets to be recovered and disassembled in a much more efficient way and will result in a less strenuous and safer work environment for the employees.

Service Recycling LLC anticipates diverting an additional 5,160 tons annually from the waste stream because of the efficiency of this machine, creating an opportunity to pursue new accounts. They anticipate creating 13 full time employees with this project as they will add additional board sorters, custom pallet builders, robot feeder and maintenance technician for the new system, etc.





St. Louis Composting Inc.-St. Louis

St. Louis Composting, Inc., located in St. Louis, was awarded \$250,000 to purchase a biochar machine for their Biochar Manufacturing Initiative. This machine would enable the company to divert more wood waste from area landfills and create biochar, which is a valuable soil amendment.

St. Louis Composting is a major composter in the State of Missouri, owning operations in St. Louis, Kansas City, and Pacific. They were awarded financial assistance for the purchase of a biochar machine that would be placed at their composting site in Pacific.

St. Louis Composting is currently purchasing out-of-state biochar to help meet the demand of this product in some of the soil mixes they are currently offering. This machine will allow them to offer new products to their customer base and will have an economic impact to their local economies. The increasing demand for biochar will be able to be fulfilled in-state and they are positioning themselves to provide this beneficial soil amendment to state residents and growers without relying on out of state resources. In addition, landfill diversion will result as they utilize wood waste as a feed stock in the production process.

St. Louis Composting anticipates creating three full time positions and diverting approximately 30,000 tons of wood waste consisting of pallets and wood waste coming from transportation and waste management companies.





Business Assistance

Summary of FY 24 Projects

Company	City	Material	Est.Tons Diverted Annually	Est.New Jobs	Award	Investment	Annual Savings
Printerior, LLC	St. Louis	Plastics	30	4	\$67,400	\$135,188	\$9,330
Service Recycling, LLC	Joplin	Wood	5,160	13	\$225,500	\$500,000	\$387,000
St. Louis Composting, Inc.	St. Louis	Wood	30,000	3	\$250,000	\$589,705	\$1,710,000
TOTALS			35,190	20	\$542,900	\$1,224,893	\$2,106,330

Recycling market development is working!

The Missouri Market Development Program's fiscal year 2024 new investment in these 3 Missouri recycling businesses helped our economy and environment by:

- Leveraging over \$1.2 million in total investment
- Creating 20 Missouri jobs
- Diverting more than 35,000 tons annually from Missouri landfills
- The avoided disposal costs for the materials used in these projects totals more than \$2.1 million





Business Assistance

Summary of FY 2024 Active Projects (previously awarded -still open)

In addition to the three new projects awarded in fiscal year 2024, 10 previously awarded projects were actively managed by the program during the fiscal year.

			Est. Tons	Est.			
			Diverted	⊏si. New			Annual
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Company	City	Material	Annually	Jobs	Award	Investment	Savings
Bluebird Composting	Fulton	Organics	3,155	4	\$100,000	\$195,000	\$220,850
Capital Materials LLC	Jefferson City	Tires	500	1	\$100,000	\$325,000	\$30,000
EcoShred	Springfield	Tires	30,000	4	\$250,000	\$1,600,000	\$1,290,000
Fiberlite Technology, Inc.	Joplin	Paper	372	3	\$75,000	\$170,000	\$27,956
Holliday Construction	Boonville	Organics	4,380	4	\$230,500	\$461,160	\$258,420
Korte Enterprises, LLC	Jefferson City	Wood	2,600	3	\$250,000	\$500,000	\$221,000
Northwest Mo. Univ.	Maryville	Paper	44	0	\$40,095	\$53,461	\$2,117
ReFAB	St. Louis	Wood	100	8	\$169,500	\$503,220	\$3,000
St. James Winery, Inc.	St. James	Organics	1,000	12	\$175,500	\$2,500,000	\$49,000
Summit Transfer, LLC	Lee's Summit	Const.	46,800	22	\$240,000	\$5,000,000	\$1,170,000
TOTALS			88,952	61	\$1,630,595	\$11,307,841	\$3,272,343

Recycling market development is working!

These 10 previously awarded, active projects benefited the Missouri economy and environment by achieving the following:

- Leveragingover\$11million in total investment
- Creating 61 Missouri jobs
- Diverting nearly 89,000 tons annually from Missouri landfills
- The avoided disposal costs for the materials used in these projects totals over \$3.2 million each year





Informational Services

Working Toward Solutions

During the fiscal year, staff advised businesses on market conditions, locating recovered material feedstocks, identifying markets, developing products and creating business presentations. Staff also responded to requests for information on marketing, planning assistance and markets for recyclables from governments and not-for-profit organizations.

The Missouri Market Development Program assisted businesses, governments, organizations and individuals in locating specific recycled-content products.

Information sharing is an important aspect of the Missouri Market Development Program's efforts to help build Missouri's recycling infrastructure. The program provides resources and informational services to businesses, governments and other organizations to increase manufacturing, marketing or purchasing of recycled content products.

Missouri Market Development Program staff also promoted Missouri's recycling industry and the "buy recycled" message in speaking engagements and workshops and participated in state, regional and national recycling issue conferences and meetings.

Staff develop and maintain information for a Missouri Market Development Program web site (www.eiera.mo.gov/mo-market-dev-program) and continue to gather and refine information for future web publication. The web site enables businesses to download the Missouri Market Development Program Application for Financial Assistance and access other program publications and information.

During the fiscal year, Missouri Market Development Program staff supported and participated in state, regional and nation-wide organizations and activities to gain and share knowledge and to develop professional relationships in the areas of recycling, economic development, solid waste and related environmental or business areas. Active involvement in these initiatives enables Missouri Market Development staff to approach problem solving from many perspectives and better facilitate growth of Missouri's recycling businesses.





Outlook

Focusing on Opportunity

Economy

The economic benefits of recycling versus landfill disposal seem negligible at the front end, but as materials flow further downstream, the value of the commodity increases, as do the wages and skilled labor required to turn the commodity into an end product. Recycling is estimated to create nearly five times as many jobs as landfilling. The recycling industry is an elaborate and diverse network of public sector institutions and private industry. Recycling involves not only collection, but also processing and manufacturing. At each level, jobs are created and income is generated. Recoverable material destined for a landfill is a leakage from the local economy.

Environment

The greatest environmental benefits of recycling are related not to landfills but to the conservation of energy and natural resources and to the prevention of air and water pollution when a recycled material, rather than a raw material, is used to make a new product. Using recovered materials in preference to virgin also helps stimulate Missouri's development of green technologies. The benefits of developing markets for recovered materials are found at every stage of the life cycle of a consumer product - from the mining of raw materials through its use and final disposal.

Challenges

Missouri has made great strides in recycling since 1990, but much of our recovered material continues to flow out of state, often to other countries where it is used in manufacturing products that are resold to the United States. According to the Department of Natural Resources, 1.9 million tons of recyclables are disposed of in Missouri landfills each year. End markets, particularly local end markets, for many materials simply do not exist.

Opportunities

The Missouri Department of Economic Development reports that Missouri exports of scrap exceed \$5 million annually. Recirculation of even a fraction of this within the state would have significant economic benefits for Missouri. Manufacturers that use recovered materials do so in lieu of feedstocks that are mined, harvested or extracted outside of the region. As a result, these businesses create jobs closer to home and have a smaller environmental footprint than companies that rely on raw material extraction. The Missouri Market Development Program acts to counter-balance foreign demand by developing local markets that will in turn create jobs and broaden the domestic tax base. Recycling market development feeds directly into building Missouri jobs, supports larger, private sector investments, promotes resource efficiency and spurs new technologies.





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