



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

APR 19 2017

**MEMORANDUM**

OFFICE OF WATER

**SUBJECT:** Request for Finance-Related Advice from the Environmental Financial Advisory Board

**FROM:** Michael H. Shapiro, Designated Federal Official  
*Michael Shapiro*  
Environmental Financial Advisory Board

**TO:** General Counsel  
Assistant Administrators  
Inspector General  
Chief of Staff  
Associate Administrators  
Regional Administrators

The purpose of this memorandum is to invite you to identify major issues involving the agency's priorities for which the Environmental Financial Advisory Board (EFAB or the board) can provide you and your offices with finance-related advice and recommendations.

The EFAB is the EPA's only multi-media, finance-related advisory committee. It serves as a tremendous resource and provides an opportunity to collaborate and involve external stakeholders as we formulate policy and guidance. The board represents a broad range of public and private interests including banking and finance; state, local and tribal governments; business and industry; academia; and public interest groups. The EFAB focuses its advice and recommendations on promoting affordability by reducing environmental costs; encouraging environmental stewardship; targeting financing to small communities; and building state, local, and tribal financial capacity.

The advisory committee process has proven to be one of our most important tools to achieve collaboration and build environmental consensus among the agency's diverse customers and stakeholders. The agency is most effective when we hear the voices of a group of people who are not solely federal employees and who have an expertise or perspective which can provide value to the agency's decision-making processes.

I have attached 2 recent program charges as an example, for your reference. Please submit your request(s) for assistance, including a brief project description and the name of a program contact to Vanessa Bowie, EFAB staff, by Friday, May 12. If you have any questions, she can be reached at 202 564-5186 or [bowie.vanessa@epa.gov](mailto:bowie.vanessa@epa.gov). Thank you for your attention to this request.

Attachment

cc: Deputy General Counsel  
Deputy Assistant Administrators  
Deputy Inspector General  
Deputy Chief of Staff  
Deputy Associate Administrators  
Deputy Regional Administrators  
Assistant Regional Administrators

## **New Project Charge for EFAB**

**Identify strategies for more sustainable financing of domestic recycling programs and infrastructure that are still able to address the high volume and variety of materials entering waste streams.**

In recent years, collapsing commodities prices have undercut recycling and waste processing companies' ability to remain profitable while processing the low-value, high-volume materials that come through their facilities, such as corrugated cardboard, glass, and paper. According to data provided by Sound Research Management Group, Inc., the revenue per ton generated for curbside recycled materials has fallen at least 40 percent from a fifteen year high in late 2011. At the same time, commodities worth billions of dollars are landfilled every year, and we pay to do so. The Georgia Department of Community Affairs determined that the state pays \$100 million dollars to bury materials valuing a total of \$300 million.

The disposal of otherwise recyclable materials remains a major environmental issue in the United States: materials management across the entire life cycle of products, from design to disposal, accounts for 42% of all U.S. greenhouse gas emissions. EPA's report *Advancing Sustainable Materials Management: Facts and Figures 2013* estimated that product packaging (including cardboard, glass, aluminum, and plastic) made up the largest portion of municipal solid waste (MSW) generated in 2013 – more than 75 million tons, or 29.8 percent of all MSW. At present, only 51 percent of the packaging waste being generated is being recycled, most of which is cardboard. Infrastructure, access, and education for the recycling of plastic, glass, and metal in particular remain severely underdeveloped. This is also an environmental justice issue, as recycling programs are most underdeveloped in rural areas, poorer communities, and tribal territories.

EPA's Sustainable Materials Management program is currently developing a focused effort to address materials waste and sustainability. EPA has found that the types and volumes of materials entering materials recovery facilities (MRFs) is changing almost as rapidly as the facilities themselves. For example, ten years ago flexible film comprised less than one percent of the packaging waste stream; today, flexible film represents nearly 18 percent of all packaging waste. At the same time, single stream recycling has become an important factor in the dramatic uptick in the volume of material being recycled but also possibly a significant contributor to the decrease in the profitability of recycling as contamination accentuates the problem of falling commodities prices.

Questions that have arisen because of this crisis include:

1. Can co-funding arrangements and credit mechanisms be designed that will better handle market volatility and distribute risk among recycling stakeholders, including the facilities themselves, municipal governments, manufacturers, and the public?
2. Can markets for recycled materials be developed that are proximal to recycling sites?



3. Can recycling infrastructure be developed that simultaneously maximizes the types of materials able to be processed and the ease with which the public can use the system, while maintaining profitability?
4. How can recycling infrastructure be built to serve the material recovery needs of today, but also to be able to adjust to material changes over time? Can recyclers/processors connect with packaging designers to ensure that recyclers' needs are accounted for in the design of new products and that recyclers are being given sufficient lead time to prepare for processing new types of materials?

***Specifically, the OLEM requests that EFAB benchmark the financing mechanisms in use today and identify financing strategies for recycling infrastructure that is more sustainable and resilient to market volatility. Options should include mechanisms that involve public infrastructure funding programs, products private banks can consider making available to their customers, partnership options that may include public, private and /or not-for-profits, municipal bonds and other innovative ideas that would provide financing mechanisms in states, counties, underlying municipalities and communities generally that seek to implement financing programs for recycling infrastructure.***

# **Financing Strategies for Decentralized Wastewater Systems**

## **Project Charge for EFAB**

**Identify existing and prospective funding strategies that better address the challenge of funding the repair or replacement of failing decentralized wastewater systems**

Failing decentralized wastewater systems presents a chronic challenge to homeowners, regulators and funding entities. More than 20% of US households rely on individual onsite systems (septic tanks) or small community cluster systems to treat their wastewater. It is estimated that between 10 and 20 percent of these systems are malfunctioning as a result of inadequate management. In addition, more than half of the existing systems are more than 30 years old. EPA and 18 partner organizations have signed a Memorandum of Understanding to engage in efforts to improve public awareness of the need to operate and maintain decentralized wastewater systems. Most systems are located in rural or suburban areas and homeowners and communities often do not have the capital or access to capital necessary for repairs. The biggest barriers to repair, replacement, or upgrade of decentralized systems is the limited access to funding and the challenge of affordability. Limited funding access is, in part, related to the high costs of repair and replacement relative to household income that raises credit concerns on the part of prospective lenders. Affordability also presents challenges to government policymakers to make available funds that do not require repayment.

Questions that arise:

1. Can co-funding arrangements and credit mechanisms be designed that can distribute risk among participants such that more robust and sustainable mechanisms can be developed that might involve a cross section of public, private and/or not for profit entities?
2. Consistent with establishing a dedicated revenue stream for Clean Water SRF loans, as required by the Clean Water Act, are there minimum credit standards that can be identified that would allow SRFs to expand lending activities for such projects? In conjunction with, or in the absence of, other funding resources?

The Office of Water requests that EFAB identify financing strategies for decentralized wastewater infrastructure that provide access to funding for low income/poor credit communities and/or households. Options should include mechanisms that involve public infrastructure funding programs such as the Clean Water State Revolving Fund, products private banks can consider making available to their customers, partnership options that may include public, private and /or not-for-profits, municipal bonds and other innovative ideas that would provide financing mechanisms in states, counties, underlying municipalities and communities generally that seek to implement financing programs for decentralized wastewater infrastructure.

