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Designated
Federal Official

March 31, 2010

Honorable Gina McCarthy
Assistant Administrator
Office of Air
U.S. Environmental Protection Agency
Washington, D.C.

Dear Ms. McCarthy:

The Environmental Financial Advisory Board (EFAB) is pleased to submit the enclosed report, "*Financing Mechanisms for Reducing Greenhouse Gas Emissions, and Other Air and Water Pollution Problems.*" This report is the fourth in a series by this Board aimed at creating finance mechanisms to address the reduction of greenhouse gas emissions and other air and non-point source water pollution problems.

This report calls for the implementation of programs at the state and local levels to finance the installation of energy efficiency and environmental improvement devices at public and not-for-profit facilities such as: local government buildings; colleges and universities; hospitals; schools; and churches.

As you know, the water sector has been well provided for in general. The Clean Water State Revolving Fund (CWSRF) is approaching \$75 billion in size and the Drinking Water State Revolving Fund (DWSRF) is approaching \$15 billion. Money wisely spent. Meanwhile, there are no serious programs at all in the air sector. And, of all the CWSRF's billions, only 4% of the funds have been spent on non-point source water pollution. This is especially disturbing for the states that surround major bodies of water such as Puget Sound, Long Island Sound, San Francisco Bay, the Chesapeake Bay, and especially the Gulf of Mexico, where hypoxia and other effects of agricultural runoff have wreaked havoc on water quality. New programs to finance air quality improvement and reductions in non-point source water would be an invaluable addition to the cause.

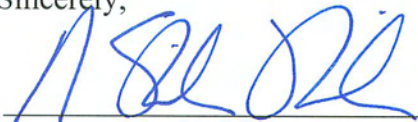
Based on EFAB's examination and findings of a concept to extend energy efficiency programs to public and non-profit facilities, the Board submits five recommendations for your consideration. We hope that you will find this report constructive and useful. The members of EFAB appreciate having the opportunity to advise and assist the Agency on important environmental finance issues.

If you or your staff have questions about this report and would like to arrange a meeting, please let us know.



A. James Barnes
EFAB Chair

Sincerely,



A. Stanley Meiburg
EFAB Designated Federal Official

Enclosure

cc: Lisa P. Jackson, Administrator
Bob Perciascepe, Deputy Administrator

Environmental Financial Advisory Board

EFAB

A. Stanley Meiburg
Designated Federal
Officer

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Financing Mechanisms for Reducing Greenhouse Gas Emissions, and Other Air and Water Pollution Problems

This report has not been reviewed for approval by the U.S. Environmental Protection Agency; and hence, the views and opinions expressed in the report do not necessarily represent those of the Agency or any other agencies in the Federal Government.

March 2010

Printed on Recycled Paper

Financing Mechanisms for Reducing Greenhouse Gas Emissions, and Other Air and Water Pollution Problems

BACKGROUND

In 2008, the Environmental Financial Advisory Board (EFAB) urged the Agency to advocate and encourage states to create Air Quality Finance Authorities to finance commercial air pollution reduction projects for facilities such as truck stops, dry cleaners, auto body shops, as well as mobile sources such as diesel engines for trucks, construction and other heavy equipment, as well as those for agricultural use¹.

In 2009, EFAB issued two reports urging the Agency to advocate and encourage both states and local governments to adopt “Voluntary Environmental Improvement Bond” programs to finance energy efficiency as well as air and non-point source water pollution reduction programs for homes and farms². The Department of Energy has launched a major drive for these purposes. They have succeeded in getting legislation adopted in sixteen states. They call their program “PACE”, for Property Assessed Clean Energy. Unfortunately, the PACE program only deals with clean energy. With only one exception³, there are no provisions for air or water pollution reduction in any of these sixteen new state laws.

THE CONCEPT

A concept to extend energy efficiency programs to public and not-for-profit facilities was developed in 2009 at the University of Delaware by Dr. John Byrne, Distinguished Professor of Energy and Climate Policy and a member of the Nobel Prize-winning Intergovernmental Panel on Climate Change (IPCC). In essence, the concept, as Professor Byrne developed it for the State of Delaware, is this:

A group of institutions composed of local governments, universities, schools and hospitals form a consortium to improve their energy efficiency. The consortium hires either an electric utility, or other energy service company, to complete an energy audit at each of their facilities showing them the cost savings for making certain energy efficiency improvements such as installing insulation or solar panels. Based on these audits, each institution decides which improvements they will make (if any). The Sustainable Energy Utility (SEU), a nonprofit organization created by the State of Delaware, issues a bond to fund all of them. Each institution then executes a long

¹ “Report on Innovative Finance Programs for Air Pollution Reduction”

² “Report on ‘Voluntary Environmental Improvement Bonds’: An Innovative Local Environmental Finance Concept for Mitigation of Climate Change Risk; Air Pollution Reduction; and the Reduction of Non-Point Source Water Pollution”, and, “Report on the Financial, Underwriting, Risk Mitigation and Consumer Protection Considerations for the Adoption of Voluntary Environmental Improvement Bond (VEIB) Programs”.

³ The State of Arizona’s PACE statute includes greywater management and rainwater conservation systems.

term payment agreement with the SEU to pay off the cost of their respective improvements and their audits. In short, this is a concept to aggregate otherwise relatively small energy efficiency projects into a single finance program big enough to fund cost-effectively. The SEU announced on January 7, 2010 that they expected their first bond issue to be in the \$30-35 million range and that they had begun the process of identifying state owned buildings for energy efficiency retrofits.

Delaware's SEU model shows considerable promise because it has the advantages of a nonprofit agency which can act more nimbly than a government agency. At the same time, it is governed by a public board, named by the state's Governor, ensuring public oversight. As a "utility", however, it necessarily only deals with energy projects, not other environmental improvements.

This concept is virtually identical to our VEIB concept except that it refers to public institutions and not-for-profit facilities rather than homes and farms. However, because all of these facilities are tax-exempt, the bonds issued to fund them are also tax-exempt.

We believe that Dr. Byrne's concept has great merit and, with significant additions, should be implemented countrywide. We believe that this concept should be modified based on the following considerations:

- Even though an institution might be exempt from real property taxation, these pledges (except for the local governments') should, as in the VEIB program, be secured by a tax lien. This will greatly facilitate bond financing and should result in longer terms and lower interest rates.
- There is no reason why not to include churches in such a program, assuming they are creditworthy, as all of the other private institutions would have to be.
- Not-for-profit corporations are not always the most creditworthy of institutions and can be problematic to underwrite. Local government bond issuers may well want to consider general obligation pledges to support the credit ratings of these bonds.
- Individual states could either create their own SEUs, or they could simply pass enabling legislation for counties and other local governments to issue bonds to fund these programs, or states could create State Air Quality Finance Authorities which could issue bonds for this program, for VEIBs, and for the other types of air pollution reduction projects described in our 2008 report.
- While the bonds might be eligible for tax-exempt status, the issuing agency might elect to issue a taxable, direct-pay Build America Bond (BAB) where the federal government will pay the SEU a 35% interest rate subsidy. Such BABs might actually result in a lower net interest cost than would tax-exempt bonds, especially for the longer maturities. There

are, however, complicated rules for the issuance of BABs where some of the bond payments may come from not-for-profit, tax-exempt organizations. Issuers should consult competent bond counsel on this matter to assure compliance with all Internal Revenue Code requirements.

- The use of BABs opens the question of whether a trust could be created and owned by the local electric utility, or a group of businesses, or groups of private investors, or - in the case of churches and private schools and hospitals - major donors. These groups would own the devices and lease them to the exempt organizations and then take advantage of the federal tax benefits. Unfortunately, under current law, the biggest tax benefit – the energy efficiency tax credit – is probably not available. We understand that Section 50(b) of the Internal Revenue Code recites what is known as the “exempt use” rule that says that if equipment eligible for a federal tax credit is used for the benefit of an exempt entity, then the credit does not apply. If energy efficiency is, indeed, a high national priority, this rule seems counterproductive. Nonetheless, tax deductions for the allowance for depreciation may be available and may well be attractive enough to warrant the creation of a lease program.
- In addition to energy efficiency projects, again like the VEIB program, such a program could be broadened to include other environmental improvements such as permeable pavement, greywater management systems, rainwater conservation and management systems, as well as green roofs.
- This concept would also fit into our 2008 recommendations to the Administrator urging the creation of State Air Quality Finance Districts. This program would be a public sector program; which would provide balance to the type of private sector programs such as diesel truck programs, organic dry cleaning programs and other initiatives, all of which could be funded with bonds issued by such districts.

RECOMMENDATIONS

Based on the above considerations, the Board would like to make the following recommendations:

- 1) That the Agency urge the states to adopt programs as described herein to facilitate the financing of both energy efficiency and environmental improvement projects for the benefit of public agencies as well as not-for-profit organizations.
- 2) That the Agency urge the States to enact statutes either: a) to create Air Quality Finance Authorities which, as conduit bond issuers, can access the municipal bond market to

finance such programs, or, b) empower counties and other units of local government to issue bonds for such purposes.

- 3) That the Agency urge the states to enact statutes to enable localities: a) to enter into voluntary contracts with homeowners and farmers (the VEIB program), with local government agencies, and with not-for-profit organizations, including churches, to finance energy efficiency and environmental improvement projects on their premises, b) to finance such projects through the issuance of taxable or tax-exempt bonds, as applicable, and, c) to secure such financings by liens and assessments against the program participants' real property.
- 4) That the Agency initiate discussions with the Department of Energy, the Department of Housing and Urban Development, the Department of Transportation, the Department of the Treasury, the Office of Management & Budget, and any other relevant agency to determine whether the Administration should recommend to the Congress that Section 50(b)(3) of the Internal Revenue Code be amended to recognize applicable tax credits for energy efficiency and environmental improvement projects which are undertaken and used for the benefit of not-for-profit organizations such as private schools, churches and private hospitals.
- 5) That the Agency should work closely with individual States that are developing and implementing their own new and innovative programs to finance energy efficiency, air quality improvement, and non-point source water pollution projects.

The Board believes that, absent a major federal investment in air quality and an additional major investment in energy efficiency, significant investments in such areas must come from individual citizens and responsible not-for-profit organizations. The recommendations contained herein, along with those in our three previous reports, provide a blueprint for organizing such involvement and marshaling such investment at the state and local levels.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 7 2010

OFFICE OF
AIR AND RADIATION

Mr. A. James Barnes
Chair, Environmental Financial Advisory Board
Professor of Public and Environmental Affairs
Adjunct Professor of Law
Indiana University
Bloomington, Indiana 47405

Dear Professor Barnes:

Thank you for your letter of March 31, 2010, and the report entitled, "Financing Mechanisms for Reducing Greenhouse Gas Emissions, and Other Air and Water Pollution Problems." I am pleased with the recommendations set forth by the Environmental Financial Advisory Board and hope to make progress on these and previous recommendations made by the Board.

I support states' efforts to adopt programs to facilitate financing for both energy efficiency and environmental improvement projects. Low interest loan programs may help homeowners, farms, and businesses finance many environmental improvements such as asbestos removal, lead and radon abatement, and failing septic systems. At the same time, these programs may also help finance energy efficiency/renewable energy projects such as solar panels, woodstove replacement with cleaner appliances, insulation, etc.

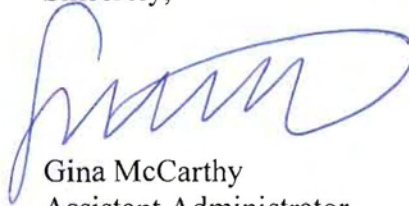
I agree that the recommendations you made regarding the creation of Air Quality Finance Authorities by states would help local governments access the bond market to finance environmental and energy projects. I understand that other federal and state agencies are developing other incentives and tax credits that may help property owners afford these improvements.

Currently, the U.S. Environmental Protection Agency (EPA) is encouraging state and local air agencies to implement innovative financing options for homeowners that want to replace older biomass appliances with more efficient, less polluting units. We know that some have suggested exploring biomass as an energy efficiency option for the Department of Energy's Property Assessed Clean Energy (PACE) program. As states implement legislation to allow the PACE program, we are encouraging them to broaden this legislation to include other environmental projects such as those mentioned above.

In addition, we are exploring a Voluntary Environmental Improvement Bond (VEIB) pilot with a state air agency to help homeowners finance the replacement of older woodstoves along with improved weatherization. This pilot has the potential to serve as a testing ground for the feasibility of a VEIB approach to financing. We look forward to partnering with a state agency and will be pleased to share lessons learned with you and the Board.

I appreciate the work that you and the Board put into the report and recommendations, and I encourage you to continue developing innovative finance solutions for homeowners, businesses, municipalities, and industries. I am especially interested and would like the Board's input on mechanisms to help fund small commercial and industrial boiler replacement or retrofits to comply with EPA's upcoming national rule for boilers.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gina McCarthy", with a large, sweeping flourish at the end.

Gina McCarthy
Assistant Administrator

cc: Stanley Meiburg