EFAB Charge Investment Tax Incentive for Water Reuse Infrastructure

Problem / Question Statement

The Water Reuse Interagency Working Group, established May 2022 under the *Infrastructure Investment and Jobs Act* (Sec. 50218), develops and coordinates actions, tools, and resources to advance water reuse across the United States. The Working Group is also charged with continued leadership of the National Water Reuse Action Plan (WRAP): a collaboration, begun in 2020, in which federal, state, tribal, local, and water sector partners work together to build communities' capacity to pursue water reuse practices. The Joint Explanatory Statement accompanying the *Consolidated Appropriations Act, 2023* included the following statement:

Given widescale deployment of private water reuse infrastructure at industrial facilities can be expensive for public utilities and local governments, the Committee directs the Agency, in coordination with the Water Reuse Interagency Working Group, to undertake a study on the public benefit of a potential federal investment tax credit to support private investment in water reuse and recycling systems. The Committee expects the Agency to report to the Committee within 180 days of enactment of this Act on planned actions to carry out this study.

While this statement is brief, based on our interpretation such a tax incentive would be focused on encouraging investment in equipment at privately owned industrial facilities to enable the use of municipally provided recycled water and/or enable onsite treatment and reuse of different sources of water. For example, manufacturing facilities would receive a tax credit to purchase and operate equipment to use municipally provided recycled water for different processes and/or treat and reuse process water within a facility for use in other processes rather than discharging wastewater into the environment or to a publicly owned treatment works (POTW).

EPA seeks a brief study and recommendations from EFAB regarding the following questions. For each charge question, the EFAB should provide a range of options (including research and literature references and other resources, where available), outlining their advantages and disadvantages.

Objectives

- A. Evaluate the "public benefit" of a potential investment tax credit for privately owned industrial facilities
 - Consider public benefits to both local utilities and ratepayers (often overlapping but also distinct). For example, this can include lower water rates/increased local water affordability than would otherwise be expected (i.e., utility does not bear the cost of having to find new sources of water to support industrial water use), potentially greater local climate resilience and drought mitigation, and a shift to a more sustainable utility business model to ensure fiscal health in light of declining water sales overall.
 - 2. How broad or narrow should the considerations for the public benefit of a tax credit be? Potential options include decreases in:
 - i. Wastewater discharges to surface waters from a publicly owned treatment works processing industrial wastewater,
 - ii. Discharges directly from an industrial facility,
 - iii. Demands on both freshwater (surface and groundwater) and treated drinking water due to the use of recycled water, and/or

- iv. Aggregate energy demand due to decreased conveyance needs for onsite water reuse as well as decreased treatment needs for processes not requiring water of drinking water quality.
- 3. How can we best measure and quantify potential public benefits? This can be monetary benefits to local water utilities, as well as environmental benefits to the entire community.
- 4. Externalities and unintended consequences should also be taken into consideration. For example, increased onsite reuse may result in more a concentrated discharge to a POTW and result in pretreatment concerns for a POTW.
- B. Evaluate the optimal investment tax incentive to encourage innovation
 - How can a tax credit be best established to encourage investment without providing a subsidy that is too generous (i.e., a subsidy for investment that the private entity is likely to have made even without the benefit of the credit)? What is the generally accepted minimum return on investment for water reuse and recycling infrastructure at industrial facilities? Should there be a required public benefit be (e.g., volume of water savings) to qualify for the tax credit?
 - 2. Should this be a one-time tax credit or an annual tax credit? If this is a recurring tax credit, for how long should the credit be available for?
 - 3. Should there be limitations on the industrial sectors eligible for a potential tax incentive? Should the value of the tax incentive be the same across eligible sectors or should there be specific priorities?
 - 4. Are there any specific differences between the use of municipally provided recycled water and the treatment and reuse of onsite generated wastewaters that a potential tax incentive should take into consideration?

EFAB Mission Fit

EFAB's mission is to explore ways to lower costs and increase investments in environmental protection. An investment tax credit to encourage private investment in water reuse and recycling infrastructure has the potential to expand the market for recycled water and innovative treatment and reuse technologies to reduce wastewater discharges and reduce freshwater demand. Since the inclusion of this request in the explanatory statement for the FY 2023 appropriations bill, several stakeholder groups have expressed interest include the WateReuse Association and the U.S. Chamber of Commerce during the 2023 WateReuse Symposium. These groups have stated that they plan to pursue this issue throughout the rest of 2023. We would expect this interest to continue and eventually result in legislative proposals for consideration by Congress.

Type of EFAB Engagement

EFAB is positioned to assist EPA by providing focused guidance to EPA on the potential public benefit of a federal investment tax incentive for water reuse and recycling infrastructure.

EFAB is comprised of experts across many segments of environmental finance and program delivery. EFAB members have deep experience and broad networks that can be quickly leveraged to provide focused advice to EPA around a critical and rapidly moving agenda. EFAB capacity can provide immediate, actionable analyses for increasing private investment in water reuse.

Approach

To accomplish this charge, EPA suggests EFAB engage the relevant federal agencies that are part of the Water Reuse Interagency Working Group to better characterize the public benefits of an investment tax incentive on private investment in water reuse and recycling infrastructure. Technology vendors, stakeholders in different industrial sectors, and municipal utilities that supply recycled water can also be engaged if is the Board deems necessary. EFAB has conducted similar engagement for other recent charges through hosting webinar panels and interviews of experts. At the same time, EPA will provide relevant research and resources that are currently available.

The ongoing implementation of similar investment tax incentives in the industrial sector focused on different types of environmental infrastructure such as energy or water should also be evaluated. Such "lessons learned" can provide insight into the pros and cons on how to structure an effective tax incentive and properly account for public benefits. The Board has previously analyzed real world examples or case studies in other charges, such as the *Evaluating Stormwater Infrastructure Funding and Financing* report.

For a final product resulting from this charge, EPA would request that EFAB submit a letter summarizing the methodology used in this study, a summary of potential public benefits, and potential policy recommendations for a federal tax incentive to support private investment in water reuse and recycling systems. EPA requests that this study be completed in calendar year 2024 with the potential to extend to calendar year 2025.