

U.S. Environmental Protection Agency Environmental Financial Advisory Board

Public Meeting Minutes

April 10–12, 2024

Location: Arlington, VA and Virtual Platform

Respectfully submitted by Edward H. Chu, EPA Designated Federal Officer
Certified as accurate by Kerry E. O'Neill, Chair, Environmental Financial Advisory Board

NOTE AND DISCLAIMER: The minutes that follow reflect a summary of remarks and conversation during the meeting. Such ideas, suggestions, and deliberations do not necessarily reflect consensus advice from the Board. Formal advice and recommendations may be found in the final advisory reports or letters prepared and transmitted to the agency following the public meetings. Moreover, the Board advises that additional information sources be consulted in cases where any concern may exist about statistics or any other information contained within the minutes.

Contents

Purpose	1
Welcome, Member Roll Call, and Review of Agenda	2
Water Affordability Workgroup	2
Greenhouse Gas Reduction Fund Charge Proposal.....	3
EPA Resilient Infrastructure Subgroup on Climate.....	7
Welcome, Member Roll Call, and Day Two Preview	7
EPA Climate Change Technical Assistance Availability and Requirements	7
Climate Change Technical Assistance Needs Panel.....	12
EPA Chief Financial Officer Update	14
Environmental Financial Center Network Update	16
Welcome, Member Roll Call, and Day Three Preview.....	18
Greenhouse Gas Charge Proposal Discussion and Vote	18
Climate Adaptation Financing.....	21
Water Reuse Workgroup	24
EPA Office of Agriculture and Rural Affairs	25
Public Comment	26
Closing Thoughts	27

Purpose

The U.S. Environmental Protection Agency (EPA) Financial Advisory Board (EFAB or Board) is an advisory committee chartered under the Federal Advisory Committee Act (FACA) to provide advice and recommendations to the EPA on creative approaches to funding environmental programs, projects, and activities. The purpose of the meeting is for the EFAB to discuss current advisory charges, provide updates on previous EFAB deliverables, and to learn more about the Administration's infrastructure investment opportunities.

The meeting was announced in the Federal Register; see <https://www.govinfo.gov/content/pkg/FR-2024-03-22/pdf/2024-06109.pdf>.

To view the agenda, see <https://www.epa.gov/system/files/documents/2024-04/agenda-efab-april-2024-meeting.pdf>.

Day 1

Welcome, Member Roll Call, and Review of Agenda

Edward H. Chu | EFAB Designated Federal Officer

Kerry O’Neill | EFAB Chair

Designated Federal Officer (DFO) Edward H. Chu opened the meeting with introductory remarks. He gave a brief overview of the Board as an independent advisory body, ensuring the meeting and its related materials would be made publicly available. He acknowledged four members of the public registered to provide comment during the three-day meeting.

Kerry O’Neill conducted the roll call.

Roll Call

Courtney L. Black, present

Steven J. Bonafonte, present

Angela Montoya Bricmont, present

Matthew T. Brown, present

Stacy Brown, present

Albert Cho, not present

Janet Clements, present

Lori Collins, present

Zachary Davidson, not present

Jeffrey R. Diehl, present

Sonja B. Favors, present

Phyllis R. Garcia, present

Eric Hangen, present

Barry Hersh, present

Craig A. Hrinkevich, present

Margot Kane, not present

Thomas Karol, not present

George W. Kelly, present

Gwendolyn Keyes Fleming, not present

Cynthia Koehler, present

Colleen Kokas, present

Joanne V. Landau, present

Lawrence Lujan, present

MaryAnna H. Peavey, present

Dennis A. Randolph, present

Sanjiv Sinha, present

Marilyn Waite, not present

David L. Wegner, present

Gwen Yamamoto Lau, present

Kerry O’Neill and Ed Chu announced one schedule change to the agenda: the EPA Resilient Infrastructure Subgroup on Climate presentation would not take place on April 10. Instead, an update from Environmental Finance was expected. Ed Chu provided additional context about the EPA Climate Change Technical Assistance presentation on April 11, emphasizing its focus on communities and the intersection with climate change.

Water Affordability Workgroup

Cynthia Koehler and Janet Clements | Workgroup Co-Chairs

Cynthia Koehler provided an overview of the Water Affordability charge. The charge encompasses five primary objectives, including exploring capital projects that best address water affordability while also solving water infrastructure challenges; identifying and analyzing state or local barriers to assistance programs, their financing, and implementation; examining

rate structures and designs to assist households affected by increasing costs of water services; researching flow of State Revolving Funds (SRF) for extra subsidization to rate payers impacted by funding capital infrastructure projects; and providing recommendations on how the EPA can assist in the development of supportive policies that assist customers. She described EFAB's primary focus on the first two objectives.

Regarding the first objective, the workgroup selected five capital project affordability strategies following an in-depth exploration of various approaches. The approaches included upscaling decentralized green infrastructure and innovating with technology to identify which infrastructure services at scale have the most substantial impacts. The workgroup will also establish models for lifestyle cost comparisons and look at the role of financing in reducing rate impacts. Additionally, adopting multi-benefits analysis to identify the full range of benefits beyond the immediate ones should allow for effective leveraging of external sources of capital and generate greater affordability. Finally, the workgroup will identify key conditions for incentivizing efficiencies and performance such that these can reduce capital project costs.

Regarding the second objective, the workgroup addressed the issue of consumer assistance program barriers. Within this scope, they focused on four subtopics: the legal and rate funding challenges; low participation and administrative costs; limited access to low-income consumers; and overall funding levels.

Cynthia Koehler explained that much work had already been done to highlight issues around funding restrictions, cross-subsidy concerns at state and local levels, and restrictions on rate settings that impact available financing. The workgroup is pulling together available literature, which they will use as a foundation for further work. The literature has thus far revealed that low participation and insufficient funding to address the annual assistance needed nationwide (estimated at \$2.5-8 billion) are some of the largest barriers overall.

Janet Clements spoke about how these two objectives tied into the third, upcoming objective: examining how rate-setting practices could better address affordability concerns. There were recommendations for the first two objectives that were under consideration, including tying income to a class of service, using rate revenues to fund consumer assistance programs, examining legal interpretations (potentially redefining and updating terms accordingly), and establishing a national assistance program. She questioned whether the EPA could recommend changes to statute language, cognizant this would be a large barrier. She also described funding consumer assistance programs with non-rate revenues as a potential solution.

Cynthia Koehler opened the floor for discussion.

Kerry O'Neill asked whether the workgroup had considered staging deliverables, or if the Board could assist in an iterative process given the scope of the charge.

Both co-chairs responded, indicating they had not, but that the workgroup would be very receptive to this approach.

Ed Chu added that if deliverables were staged, it would open more opportunities for interested parties outside the Board to engage and comment. He pointed out that recommendations broadly fall into two categories: actions the EPA could take now and actions for systemic change. Janet Clements agreed and indicated that most of what the workgroup had focused on were actions the EPA could take immediately.

Ellen Tarquinio, director of EPA's Water Finance Center, welcomed recommendations for more immediate actions, stating the organization wants to integrate these proposals into the EPA's Water Affordability Needs Assessment and is eager to support households and the broader sector.

David Wegner relayed that the EPA feedback regarding any sequencing or prioritization would be welcome, especially as legislation passed by the Administration is being implemented.

George Kelly asked whether an opportunity existed to integrate affordability recommendations with potential utility compliance upgrades given the latest news of the EPA regulating forever chemicals.

Janet Clements replied that the workgroup had not discussed this extensively; rather, they focused on helping utilities prioritize regulations and their integrated planning practices to maximize benefits and protect public health.

Sanjiv Sinha asked for a reminder on the project's timeline. Cynthia Koehler stated it should be completed by October 2024.

Angela Montoya Bricmont asked for clarification on whether the EPA prefers recommendations involving direct actions or those that more broadly support the industry. Ellen Tarquinio responded that a combination of recommendations would be best; this way, the agency and industry could work in tandem to make expedient changes wherever possible.

Greenhouse Gas Reduction Fund Charge Proposal

David Widawsky | Director, EPA Office of the Greenhouse Gas Reduction Fund

Ashley Allen Jones | Senior Finance Advisor, EPA Office of the Greenhouse Gas Reduction Fund

David Widawsky provided a brief overview of the Greenhouse Gas Reduction Fund (GGRF), a national-scale, first-of-its-kind program created through President Biden's Inflation Reduction Act. On April 4, Vice President Harris had announced the selectees chosen to receive a combined \$20 billion in grants through the Fund, which will facilitate a clean energy transformation. The Fund is anticipating potential challenges; as such, the Office of the Greenhouse Gas Reduction Fund (OGGRF) has submitted a charge proposal for the Board's consideration.

David Widawsky further described the GGRF's three primary goals: reducing greenhouse gas and air pollutant emissions, delivering benefits to American communities—especially low-

income and disadvantaged communities (LIDAC), and mobilizing financing and private capital to stimulate additional deployment. The last goal was of particular interest as the GGRF is considering how to best structure the program and work with grantees to maximize success.

For additional context, he summarized the GGRF's competition structure. Three grant programs comprise the Fund: the National Clean Investment Fund (NCIF), the Clean Communities Investment Accelerator (CCIA), and the Solar for All programs. The NCIF focuses on financing nonprofit organization and entities; three grantees will be receiving \$14 billion in funding. The CCIA complements the NCIF by supporting hub nonprofits empowering LIDAC to access and gain necessary training to structure projects and utilize available financing. Five grantees will be receiving \$6 billion in funding. Finally, the Solar for All program provides financing to municipalities, states, and tribal governments to promote energy independence and reduce the energy cost burden on their communities. Up to 60 grantees will be awarded \$7 billion in funding; selectees will be announced soon. An overview of the eight announced grantees was also provided.

Within the NCIF's plan, David Widawsky explained that part of the vision around mobilizing capital was a repaying or recycling of funding back to the grant-receiving financing organizations, thereby starting a sustainable financing network. Selectees have committed to meeting and exceeding the capital received through GGRF grants and public financing to mobilize private capital. The CCIA hopes to take a similar recycling approach where subawards will be granted to community lenders who will financially support CCIA-eligible projects with revolving funds and reinvestments. This will likewise mobilize private capital.

After a brief description of the financial and technical assistance provided to rooftop residential solar and residential-serving community solar projects through the Solar for All's funding flow, David Widawsky discussed the proposed charge placed before the Board. Primarily, OGGRF is seeking input and advice on specific questions within three priority project domains: the barriers to private capital financing, transactions typologies, and capital providers. Some considerations included identifying barriers to private capital from demand and supply sides, what equity or debt providers would require to enter transactions, and locating the types of capital providers most likely to "fill the gap" for GGRF projects.

Ashley Allen Jones concluded the presentation, commenting on the necessity of codifying specific details that can be referred to in conversations with grantees and potential capital providers. The GGRF wants to be realistic about what was possible to ensure the program is constructive and runs efficiently while also being able to hold grantees accountable.

Kerry O'Neill then opened the floor for discussion.

Lori Collins expressed interest in OGGRF's vision for how to engage the private sector and, following analysis, how to encourage them to take action. Ashley Allen Jones responded that they would like to engage capital providers in conversation to hear their perspectives and discuss what would be feasible. She expects that a more defined method to encourage providers to take action will reveal itself throughout these strategic conversations. She also

suggested that grantees may have clearer strategies regarding approaching private capital providers, as they will be reaching out to them themselves.

David Widawsky commented that many selectees' applications and associated strategies have been made available on the EPA's Jira website. He provided an example of a mobilization strategy: gaining access to secondary capital markets through bundling loans. He stated that there are unanswered questions about how such an approach would work, such as where within the "trophic" level of organizations these transactions occur. He stressed that further clarification is needed and that collectively standardizing approaches could work to maximize opportunities for mobilizing private capital.

Eric Hangen expressed enthusiasm for the charge and suggested generating a database of deals across different asset classes of eligible projects. Ashley Allen Jones appreciated his comment as it touched on risk and reward.

Kerry O'Neill added that variable energy pricing around the country adds another layer of complexity to any leverage calculations.

Gwen Yamamoto Lau stated that market rates would give better leverage—many investors are seeking returns and are dissuaded by the bill savings stipulations of Solar for All. She recommended focusing on identifying types of investors early (especially for LIDAC) to avoid wasting efforts on disinterested parties.

Kerry O'Neill agreed, pointing out this was at the crux of the issue. She said that the current elevated interest environment would add constraints when bringing in private capital. She also reflected on the impact-investing world where the desire for market rate returns can be in tension with "impact first" priorities. She seconded Gwen Yamamoto Lau's suggestion of identifying genuinely interested investors early.

Barry Hersh commented on the dynamics of capital markets as they relate to the EPA's financial programs. He touched on many points, distinguishing between capital market front- and back-ends; highlighting the significant return on investment these grants can achieve; discussing the strategic use of tax credits in financing; and pointing out potential risks and rewards of guarantees in funding projects. He asked why wind energy and small-scale distributed storage received little to no mention in the GGRF program.

David Widawsky responded that distributed storage is on the table, although less interest had been expressed with regard to wind. He suggested that the size and scale of such deals may be beyond what applicants were considering when serving LIDAC. He stated that if OGGRF engages in this charge, they would be developing detailed typographies that may include such projects.

Ashley Allen Jones added that she appreciated Barry Hersh's comment on tax equity. GGRF is not a tax equity program and therefore has not yet been a focus of discussion. She suggested that if tax equity were included in the developed typologies, it could result in netting larger tax equity players; this in turn could be critical to scaling these operations.

George Kelly said that these programs are only successful if they deliver on the ground. He was curious about the flow of funding, which intermediaries would receive monies, and legal restrictions/parameters. He posed a flow chart might be helpful instead of drafting a framework.

Ed Chu asked about framing the specific deliverables and accountability on the grantees. He asked how this particular charge would help the EPA use deliverables to impact grants already written. He and David Widawsky then discussed the need for robust technical assistance (TA) programs to help grantees effectively mobilize and utilize private capital as intended. They acknowledged that while commitments to leveraging private capital are in place, detailed strategic plans are still needed to fully realize these goals.

Eric Hangen responded to Ed Chu's question, saying that implementation is not strictly included in applications. While some applicants have clear ideas on this front, others need more information which, upon receipt or clarification, may impact their ability to deliver on promised leverage. He pointed out there is an element of advising grantees, but also of advising the EPA. He felt a charge that helps provide a feedback loop would be useful.

Ashley Allen Jones concurred, emphasizing that the EPA side should be incorporated into such a feedback loop. Having flow charts and typologies for internal use that can be described externally using agreed upon definitions would allow them to establish a finance link.

Jeff Diehl stated that he sees two charges within this proposal. The first is to help the EPA better understand where leverage is originating and to consider how it will be measured. The second is a charge around TA to help newer or less-sophisticated grantees adequately create leverage at their level.

Stacy Brown stated the insurance industry receives many claims from unqualified or deceptive solar contractors. He suggested developing sound technical standards and approaches or verification for lending to ensure businesses have minimum qualifications to carry out such projects. These measures will be essential for successful long-term implementation. David Widawsky replied that this would be an important part of GGRF's program implementation.

Ashley Allen Jones responded that one of the core ways their office could provide TA is through finance basics. Most TA occurs outside the EPA due to budget constraints. She perceived a link between the two charges Jeff Diehl proffered, where the gathered information informs the TA, dialogue, and training.

Dennis Randolph expressed concern and talked about experiencing a push to change how grant money is spent, occasionally in directions far from the original grant proposal's plan. He also expressed concern over TA coming from opinions instead of help that is backed by science. He relayed anecdotes of potential applicants finding the process burdensome or becoming dissuaded by interjected opinions that would fundamentally change their proposals.

Kerry O'Neill thanked Dennis Randolph for his comment and, seeing no further comments or questions, proceeded to provide an overview of next steps related to this topic. She asked for volunteers to help the EPA client refine thoughts about the proposed charge ahead of the

exploratory workgroup vote on Friday, April 12. Sonja Favors offered to assist with this small group. Gwen Yamamoto Lau, Eric Hangen, and Lori Collins also volunteered.

EPA Resilient Infrastructure Subgroup on Climate

Kerry O’Neill announced that an EPA representative had been invited to provide an update on the work of this subgroup. This presentation would be rescheduled for the fall meeting to accommodate a schedule conflict.

Kerry O’Neill and Ed Chu concluded the day’s sessions.

Day 2

Welcome, Member Roll Call, and Day Two Preview

Edward H. Chu | EFAB Designated Federal Officer

Kerry O’Neill | EFAB Chair

Ed Chu welcomed members to the second day of the meeting. Kerry O’Neill conducted the roll call.

Roll Call

Courtney L. Black, present

Steven J. Bonafonte, present

Angela Montoya Bricmont, present

Matthew T. Brown, present

Stacy Brown, present

Albert Cho, not present

Janet Clements, present

Lori Collins, present

Zachary Davidson, present

Jeffrey R. Diehl, not present

Sonja B. Favors, present

Phyllis R. Garcia, present

Eric Hangen, present

Barry Hersh, present

Craig A. Hrinkevich, present

Margot Kane, not present

Thomas Karol, not present

George W. Kelly, present

Gwendolyn Keyes Fleming, not present

Cynthia Koehler, not present

Colleen Kokas, not present

Joanne V. Landau, present

Lawrence Lujan, present

MaryAnna H. Peavey, present

Dennis A. Randolph, present

Sanjiv Sinha, present

Marilyn Waite, not present

David L. Wegner, present

Gwen Yamamoto Lau, present

EPA Climate Change Technical Assistance Availability and Requirements

Panel Moderator: Edward H. Chu | EFAB Designated Federal Officer

Esther Sosa | Special Advisor for Policy, IRA Implementation, EPA Office of Environmental

Justice and External Civil Rights

Rachel Zuckerman | Special Advisor for Implementation, EPA Office of the Administrator

Ted Toon | Senior Advisor, EPA Office of the Greenhouse Gas Reduction Fund

Megan Brachtl | Air Quality Policy Division Associate Director, EPA Office of Air Quality Planning and Standards

Morgan Brown | Senior Technical Assistance Specialist, EPA Office of Wastewater Management

Ed Chu introduced the panel of EPA colleagues who are involved in programs providing TA. The panel discussed the requirements, resources, and finances of each program.

Ted Toon spoke about the three distinct programs within the GGRF: the CCIA, the NCIF and the Solar For All programs. He emphasized that while the EPA does not provide direct TA through this Fund, intermediaries have been selected to provide both financial and TA.

The CCIA is a \$6 billion program focused on capitalizing and providing TA to a broad network of community lenders, with two tiers: direct technical sub-awards and technical services being provided by intermediaries to community lenders. Applicants were evaluated on their plans to provide TA to their sub-grantees, encompassing various supports that intermediaries could use to support the entire network of community lenders. NFIC is a \$14 billion program, with three entities selected to be intermediaries.

Applicants were evaluated based on two activities similar to TA: market building and pre-development. Market building activities include community outreach, developing standardized project performance, and standardization of documentation training materials, while pre-development activities are more on-the-ground, such as site and building assessments, energy audits, feasibility studies, and design and engineering support. Finally, Solar For All is a \$7 billion program focused on low-income and disadvantaged communities, addressing non-financial barriers to solar development, such as workforce development, mentorship and apprenticeship programs, and feasibility studies.

Megan Brachtl provided an overview of the Climate Pollution Reduction Grants (CPRG) program, which is a \$5 billion program creating venues for looking at climate action planning and implementation. Forty-five states, Washington D.C., and Puerto Rico have all received funding during the first phase, and the deadline for the next stage of competitive implementation grants closed as of April 1, 2024. CPRG is mainly focused on planning, with many localities and entities reacting positively at dedicated funding for climate action planning.

Since applicants are coming from different places, the TA provided by CPRG varies widely and looks different from other TA programs within the EPA. CPRG focuses more on considering targets, sectors, and measures. The CPRG website continues to grow with tools and resources to meaningfully engage and receive feedback from communities. There are also ten monthly exchange forums, where grantees can meet to hone in on specific aspects of climate action planning.

Ed Chu opened the floor to any clarifying questions.

MaryAnna Peavey asked which five states declined funding and why, whether CPRG considered where pockets of unsafe amounts of air pollution exist across the country when allocating funds to localities, and whether there were any conversations about states using funding to set up programs similar to the State Revolving Fund (SRF).

Megan Brachtl answered that the five states who did not accept funding were Florida, Iowa, Kentucky, South Dakota, and Wyoming, and could not speak to why funding was not accepted. Regarding air pollution, greenhouse gas emission reduction is the largest focus of CPRG, and an additional benefit of any greenhouse gas reduction is decreased levels of air pollutants and toxins. The program asked in both planning and implementation phases for those benefits to be discussed and studied; however, air quality aspects were not discussed when determining funding allocation. She could not speak to those who applied for implementation grants, but the notices of funding opportunity called to look across all sectors for potential measures to propose, opening to the door to programs similar to the SRF.

Gwen Yamamoto Lau asked whether there were any discussions around collaborating and consolidating across all the EPA TA programs. Ed Chu asked for this question to be held until all panelists had a chance to speak.

Kerry O'Neill asked how CPRG signaled what kind of TA activities would be covered and how they scored applicants in the second stage of implementation grants. Megan Brachtl answered that they were not thinking about what technical activities would be covered because the answers would be infinite and varied. Applicants were scored based on whether low-income and disadvantaged community engagements were addressed; which sectors of the economy they would focus on; and proposed outcomes, outputs, and performance measures.

Morgan Brown spoke about the TA offered from the Office of Water (OW) and Office of Wastewater Management (OWM), which serves as free assistance services to support communities to identify water challenges, develop plans to address such challenges, build capacity, and ultimately develop application materials to access water infrastructure funding. The more specific goal of this TA is to bridge gaps with disadvantaged and underserved communities in applying to federal funding via identifying infrastructure needs, building capacity, addressing financial challenges, and understanding the federal funding application process. With the influx of funding from the Bipartisan Infrastructure Law (BIL), OW and OWM are now adding \$500 million more into water-related TA.

MaryAnna Peavey asked both how these systems utilized OW's web form to obtain TA, and whether the mode of helping gain access to federal funding is through a SRF. Morgan Brown answered that the web form launched last year and has since connected over 130 communities. Much funding has gone to SRFs, but OW is also working to help connect communities to grants from other offices and programs as well.

Esther Sosa spoke on the Environmental Justice Thriving Communities Technical Assistance Centers (EJ TCTACs). The purpose of the program is to support communities and organizations

that are interested in grant opportunities to advance environmental and energy justice, but do not know where to start or what the grant process looks like. There are currently 13 regional centers that provide hyper-specialized TA tailored to their region, and 3 national centers that develop resources, fill gaps in coverage, and spread the word on the regional centers. She provided a brief overview of the work being done in each region as well.

Kerry O’Neill asked about the level and length of funding each center receives. Esther Sosa answered that each center will receive \$10 million over a five-year period.

Sonja Favors asked whether the programs offer TA beyond needs related to grant funding, and if there was a framework laid out for each regional center. Esther Sosa answered that the definition of TA ranges from help that is more fundamental to extremely specialized assistance. What kind of assistance is provided is left up to the regional centers—because of this, there is no general framework for each center to follow.

Rachel Zuckerman spoke about the Environmental and Climate Justice Community Change Grant Program. There are two tracks: a larger pool of funds focused on large implementation projects intending to bring together climate-action strategies and pollution-reduction strategies that are community-driven, and a smaller fund focused on community capacity to engage with local governments. The second track is aimed to bring communities that have historically been shut out of policy-making processes around environmental justice issues and addressing root causes of that. The Community Change grants program launched its TA effort last November, in which they ran a competitive procurement process and selected a contractor to provide services in setting up a community-delivery model. She emphasized that there has been a huge demand for this kind of TA, and now are up to 500 communities that have requested support.

Ed Chu noted some themes from the presentations. One was the varied definitions of TA across different people, especially in the EPA versus in communities and those in the field. Another was whether there could be more impactful coordination between the different programs.

Kerry O’Neill asked whether there was any thought at OGGRF to encourage or educate grantees to utilize the resources intermediaries are bringing in for TA. Ted Toon answered that there are many conversations on cultivating the two-way street to make sure that the grantees know how to access those resources, as well as how the intermediaries can better reach out to grantees about what is available to them.

Rachel Zuckerman added that it is especially important to keep one’s audience in mind as the audience for these TA programs is very diverse. Coordination between the different programs could better serve to reach communities that may not fully understand exactly what grant programs or assistance they want.

Sanjiv Sinha said that the conversation around collaboration between the programs is key and was pleased to hear that the conversations are happening as these programs start and not as they are concluding. He asked what the metric for success looks like in each of these

programs. Morgan Brown answered that for OW TA programs, success meant seeing more communities successfully applying and receiving federal funding.

Esther Sosa said the EJ TCTAC program is working closely with their evaluation team to measure and track development metrics for what success means for the network as a whole. It is more complicated than just tracking a certain number of organizations applying for a certain number of grants. Rather, they are having organizations express interest and ask for more information rather than immediately apply. The EJ TCTAC program wants to be able to consider those conversations a success as well.

Rachel Zuckerman said the Community Change Grants program has two guideposts to measure success: whether projects happen within these communities, and whether the projects are geared for long-term success.

Ed Chu asked for Megan Brachtl to speak on what CPGR was seeing as a federal-level program. Megan Brachtl said they were especially focused on creating relationships for change to happen beyond the grant timeline. There are conversations just starting on TA trainings, raising awareness, and building expertise. They also just had their first round of deliverables from states and metropolitan areas regarding priority climate action plans. She also emphasized that ongoing dialogue and feedback were extremely important in making an impact.

Sonja Favors expressed concern about the abundance of TA programs trying to reach communities. She shared her experience working with communities and the sensory overload that occurs when thousands of organizations say they can help, but the ground-level problems that affect communities remain the same. The EJ TCTACs is specifically meant to reach underserved communities, but the design does not seem to do that, especially as an outside organization going into communities and potentially displacing others already trying to help. She encouraged a continued dialogue on community relations, so that services are appropriately and properly utilized.

Eric Hangen seconded these comments and suggested that helping underserved communities goes beyond offering TA. He provided an anecdote about working with a group of nonprofits in Puerto Rico that could not utilize a program's help due to certain restrictions in place requiring all paperwork to be completed upfront.

Stacy Brown asked how trade associations were being engaged and whether this engagement with the industry was to help develop guidelines and standards. Ted Toon answered that his program was engaging with the industry for guidelines and standards regarding concerns in the insurance industry with deceptive trade practices, and are asking selectees to do so as well and develop resources. Stacy Brown asked a follow-up question about whether there are any costs anticipated for ongoing maintenance of solar panels and solar facilities. Ted Toon answered that there were, and that the Solar For All program is interfacing with this.

Rachel Zuckerman talked about the concern around disadvantaged communities with multigenerational challenges. She said that these programs are trying to maximize the opportunity to help with acknowledging the federal government cannot do all the work. These

kinds of TA programs, despite how varied they are, are not the ultimate answer to the environmental problems these communities are facing.

Gwen Yamamoto Lau asked how these programs are tracking the communities and organizations that are assisted with applying for and receiving grant funding. She also asked whether they are setting aside resources and funding for the ongoing TA to see them through grant implementation and reporting. Morgan Brown answered that OW's TA ended when construction on infrastructure project started.

Esther Sosa responded to Sonja Favors' earlier point, saying that just because community outreach could be rocky initially, the EJ TCTACs would continue to return to communities with different approaches based on community feedback. The program is specifically adapting and responding based on what the organizations have.

Ed Chu concluded the panel.

Climate Change Technical Assistance Needs Panel

Panel Moderator: Tim Profeta | Senior Fellow, Duke University Nicholas Institute for Energy, Environment & Sustainability

Dale Bryk | State & Regional Policy Director, Harvard Environmental & Energy Law Program

Adam Kent | Blended & Inclusive Finance Director, Natural Resources Defense Council

John Moon | SVP & Sustainability Philanthropy Leader, Wells Fargo

Megan Pazik | Policy Director, Climate Mayors

Daphany Rose Sanchez | Executive Director, Kinetic Communities Consulting

Ed Chu explained that this session expanded on the previous session on TA but focused on the public and community perspective.

Tim Profeta remarked on the fortunate timing of the panel and how the resources for TA are becoming more readily available. He commented on the importance of ensuring the process is smooth for those trying to invest in TA solutions. He talked about TA in terms of demand function—focusing on TA for experts, community-based assistance, and the spectrum of general TA.

Dale Bryk commented on how community-based assistance is dependent on the needs of the community at the time of assistance at both the community and project levels. She further talked about the complexities of community-based organizations and their implications on easily supplying TA and streamlining for lenders. She made a final remark about technology platforms and their potential uses in assisting with digital programs.

Adam Kent remarked on the importance of specifying who requires TA, how it is received, and what it should look like. He reiterated the importance of an assistance pipeline and the demand for a pipeline in underprivileged areas specifically. He said that large national awardees could begin mapping and coordinating community demand.

Megan Pazik provided a mayoral viewpoint for combining and prioritizing funding from the EPA and the Department of Transportation. She referenced planning grants from the CPRG to highlight the demand for TA in certain areas, focusing on the financial aspect of the assistance and comparing small and large cities and their varying needs.

Daphany Rose Sanchez elaborated on the topic of city demands, noting that frontline communities are most affected by climate change and are therefore most often in need of TA. However, there still needs to be segmented forms of assistance across the country. She mentioned starting TA in smaller, low-income communities because of the larger effect on the family. She also emphasized the need for funding for organizations to train individuals to provide TA in their communities and the levels of support needed across all organizations involved. She concluded by saying that organizations should provide aid to get communities started on TA. Once the community is benefiting from the assistance, the organization should step aside to allow for growth in the area.

Tim Profeta asked whether any EPA programs are actively servicing a TA need. Daphany Rose Sanchez elaborated on what TA looks like for low-income individuals and the difficulty of finding organizations ready to provide loans and funds for large assistance projects.

John Moon discussed the TA needed for financial transactions and the need for straightforward language in financial agreements with lenders and communities concerning TA projects. Tim Profeta asked about possible EPA programs that could match these needs. John Moon commented on the need for specificity in the programs in terms of financial viability.

Dale Bryk talked about braided funding and the prevention of it happening on too small a scale. She remarked on the need for the funding to come to communities in the best form of assistance and the use of multiple different levels of operations working to make that possible.

Adam Kent noted the importance of building capacity at hyper-local community levels because of the specificity of TA.

Megan Pazik commented on sustainable housing and the similarities across the country in both small and large cities. She also discussed the financial health of the communities and how it relates to the need and viability for TA being brought in.

John Moon talked about the streamlining of certain TA and the need to work with state and local governments, with different sources of capital coming together at the beginning rather than the end of the project to help continue to streamline projects financially.

Daphany Rose Sanchez mentioned consumer protections and financial burdens, as well as their effect on accessibility to TA. She continued by commenting on the barriers to investing in communities for TA, saying the duplicative effort needed to handle the administrative aspect of the assistance creates a burden for both the consumer and the program.

Tim Profeta opened the floor for discussion.

Lori Collins asked how organizations could obtain expertise for creating and providing programs for TA. Daphany Rose Sanchez answered that certain cities are able to provide training and organization assessment. Adam Kent added that outside organizations are available to help non-profits and lessen the burden on individuals in terms of administrative work, hiring, and community support.

Joanne Landau asked about the benefits of using a business council versus and planning board. The question was taken for the record.

Kerry O’Neill asked the panelists what they wished for from the EPA to make their work easier. Dale Bryk talked about the importance of being able to connect the moving parts of the organizations working together to provide TA. Access to names, phone numbers, and company names of those who are involved in connecting each level of the program would speed up the pipeline. Tim Profeta asked who could provide these services. Dale Bryk answered that the EPA should encourage shared collaboration and infrastructure. Adam Kent added that mapping out what abilities, responsibilities, and funding would go to which organization could streamline the work being done.

John Moon said that there should be a relationship between the lender and project development to streamline the projects.

Megan Pazik responded, saying the Department of Housing and Urban Development (HUD), the Energy Efficiency and Conservation Block Grant, and the Department of Energy (DOE) should be involved in the conversations regarding TA. She mentioned the Local Government Advisory Council (LGAC) and the possibility of allowing them to provide input on the assistance needed in individual communities.

Ed Chu remarked that he is also unaware of a vast majority of services that would be able to provide expertise.

Megan Pazik said that it would be helpful to look at the state support center, working closely to find internal and external expertise from farther away.

Daphany Rose Sanchez commented on the Community Reinvestment Act tapping into existing connections and incorporating efficiency to find expertise.

John Moon remarked on the lack of TA providers and mentioned the possibility of a train-the-trainer program to help expand the availability of experts in TA distribution.

Ed Chu made closing remarks and concluded the panel.

EPA Chief Financial Officer Update

Gregg Trembl | EPA Deputy Chief Financial Officer

Gregg Trembl spoke on the EPA’s fiscal year (FY) 2025 and FY2024 budgets. The Biden-Harris Administration released the President’s FY2025 budget in mid-March. The EPA’s budget will

work to advance ongoing efforts to address the nation's most pressing environmental challenges and emphasizing its commitment to environmental justice. The budget continues to prioritize combating climate change and includes substantial allocations for climate-related programs, air quality management programs, clean and safe drinking water, infrastructure improvements, and per- and polyfluoroalkyl substance (PFAS) and other forever chemicals. The EPA is currently finalizing its operating plan for FY2024, and cannot release it publicly until it is presented to Congress in the next 45 days.

Regarding the BIL, Dennis Randolph asked about the amount of funding the EPA has received and the schedule for spending the remaining funds. Gregg Trembl provided the obligation rates after the meeting. Those obligation rates can be found on page 32 of the [Two Year Anniversary Report: Bipartisan Infrastructure Law \(2023\)](#).

He explained that funding from the BIL is dispersed in batches over a five-year period, with 2026 being the final year. Importantly, this funding does not expire once received. In contrast, the Inflation Reduction Act has many different funding elements that do expire on September 30 of this year. Once funding from either source runs out, internal EPA personnel will oversee the management of these grants, with ongoing internal planning to ensure oversight. Dennis Randolph responded about the importance of ensuring that there was a mechanism in place to spend the funds once they are awarded.

David Wegner asked for the funding amounts allocated for climate change and clean water. Gregg Trembl answered that \$2.9 billion was allocated for climate change-related programs and the SRFs for clean and drinking water increased by another \$1.4 billion. Michael Deane, chief of the Clean Water SRF program, said that there was a strain on SRFs due to Congressionally-directed appropriations thereby increasing pressure on state funding available for infrastructure projects.

MaryAnna Peavey talked about these operational challenges that states face, noting that a significant portion of SRF is allocated to earmarked projects that are for very specific use. This can lead to a depletion of available funds for other projects. A significant portion of funds is directed toward lead service line replacements, with additional funds for addressing PFAS. She pointed out the delays in using these funds because of the need for substantial preparation time for communities to implement the changes. She also expressed concern about the depletion of the base SRF due to Congressionally-directed spending, as well as the broader issue of stagnant operational funds that can impact staff retention. Gregg Trembl responded that the EPA collaborates with different offices to contribute insights during legislative processes. He encouraged individuals to provide feedback to their Congressional representatives to ensure that community needs are aligned with Congressionally-directed spending intentions.

Ed Chu asked about accountability for the unprecedented amount of money involved. Gregg Trembl answered that the EPA has its own Inspector General that works with the Office of the Chief Financial Officer (OCFO) to ensure that funds are accounted for. It is important for spending of this scope to have the right balance of control that allows money to be spent but

that it is also used appropriately. The EPA is looking at other agencies for best practices for managing these very large programs.

Barry Hersh asked how efficacy of programs using non-governmental funds are measured. Gregg Trembl said that their Office of Planning and Performance Management works with these programs to ensure that they align with the EPA's long-term performance goals and are being used as intended. The Office of Management and Budget (OMB) also has some oversight on performance measures.

Angela Montoya Bricmont asked whether the office made recommendations for the assessment and redistribution of funds for recipients who are further ahead than other states. Gregg Trembl said that once funds are appropriated to the EPA for specific uses, they look at it from a macro level, but he is not aware of redistribution. Ed Chu added that once funds are distributed to program offices, any shift would occur within that program office.

MaryAnna Peavey said that the EPA is currently reviewing its allocation process and reallocation based on need and demand. It is unlikely that there would be unused funds that goes back to the states.

George Kelly asked about the steps involved in obligations for the GGRF. Gregg Trembl said that the Notice of Funding Opportunity was released and 8 were selected. This met the threshold for the September 30, 2024 expiration. These funds should move into obligation this summer. Once the funds are expended, then there is nothing for the government to do but monitor the funds.

Gwen Yamamoto Lau asked whether unexpended funds could be used for something else. Gregg Trembl said that it depended on the terms and conditions. Once the funds are awarded, it is considered expended. Interest earned on government funds sometimes needs to be returned, but generally the process is set up such that funds will be expended for its intended purpose. Ed Chu added that it was unusual for funds to not be spent. Further, funds had to be used only for their intended purpose.

Ed Chu concluded the panel.

Environmental Financial Center Network Update

Heather Himmelberger | Director, Southwest Environmental Finance Center at the University of New Mexico

Heather Himmelberger talked about the history of Environmental Finance Centers (EFCs), explaining the distinction between multimedia EFCs, which address environmental issues such as air pollution and climate change, and EFCs under the BIL for water and wastewater infrastructure. She talked about a specific project in Albuquerque, New Mexico that addressed environmental justice in air pollution, noting that the broader scope of EFCs extends beyond water-related issues.

The EFC Network (EFCN) facilitates collaboration among different centers to tackle projects that exceed the capacity of individual centers. The EFCN operates under a cooperative, non-competitive environment to enhance their collective impact. She addressed specific environmental concerns, such as water reuse and affordability, which has ongoing collaboration. The newly introduced PFAS rule on utility affordability created a financial burden to maintain the infrastructure needed to comply with emerging regulations. She noted the need to address climate change adaptation, which will be an increasingly important initiative for utilities across the nation.

Kerry O’Neill asked about the collaboration between the EFCN and the TCTACs. Heather Himmelberger answered that they conduct regular meetings with the TCTACs and have been successful in aligning programs in areas such as water, wastewater, and energy. For instance, New Mexico State University is a member of the TCTAC network, which has facilitated a collaborative approach for addressing broad environmental and health related issues, such as PFAS and microplastics. She advocated for continued collaboration to enhance the EPA’s reach.

MaryAnna Peavey said that a community might not need to go to a project but rather just need upfront planning. She also asked for clarification about the number of multimedia EFCs that receive funding. Heather Himmelberger said that she did not know the precise number, but it was around 12 to 17. It is confusing because they may be double counted depending on whether they subcontract to a national EFC. MaryAnna Peavey suggested that a roadmap of funding and partner relationships would be very helpful. Heather Himmelberger agreed that not all require infrastructure and that many times a collaboration can address more complicated problems. She has encouraged the EPA to reduce duplicative efforts.

Kerry O’Neill and Ed Chu agreed that a roadmap would be very useful. Ed Chu added that the roadmap should include the journey that projects move through. Heather Himmelberger added that no two communities have the same needs and there should be a way to understand strengths and weaknesses of each. Eric Hangen suggested that the TCTACs should map their particular ecosystem. Ed Chu talked about the complexity of different programs and their activities and the challenges of tracking these, particularly in light of the increased funding and increased tracking needs.

David Wegner asked whether there was standardization for funding and metric tracking across the ten EFCs, a requirement for quarterly reports, and a cumulative database or consolidated system to share lessons learned. Heather Himmelberger said that there are some standard metrics that all EFCs are required to report; however, there are some metrics that each center chooses to track and report to the EPA. Each EFC project is aligned with the EPA quarter in terms of reporting. In terms of a consolidated database of lessons or findings, the EFCs are not quite there but she would like to see it developed. The multimedia EFCs do share lessons informally.

Kerry O’Neill and Ed Chu concluded the day’s session.

Day 3

Welcome, Member Roll Call, and Day Three Preview

Edward H. Chu | EFAB Designated Federal Officer

Kerry O’Neill | EFAB Chair

Ed Chu welcomed members to the final day of the meeting and extended special thanks to Ellen Tarquinio and Tara Johnson for their work in holding the meeting.

Kerry O’Neill conducted the roll call.

Roll Call

Courtney L. Black, present

Steven J. Bonafonte, present

Angela Montoya Bricmont, present

Matthew T. Brown, not present

Stacy Brown, present

Albert Cho, not present

Janet Clements, not present

Lori Collins, present

Zachary Davidson, present

Jeffrey R. Diehl, not present

Sonja B. Favors, not present

Phyllis R. Garcia, present

Eric Hangen, not present

Barry Hersh, present

Craig A. Hrinkevich, present

Margot Kane, not present

Thomas Karol, not present

George W. Kelly, not present

Gwendolyn Keyes Fleming, not present

Cynthia Koehler, not present

Colleen Kokas, not present

Joanne V. Landau, present

Lawrence Lujan, present

MaryAnna H. Peavey, present

Dennis A. Randolph, present

Sanjiv Sinha, present

Marilyn Waite, not present

David L. Wegner, present

Gwen Yamamoto Lau, present

Kerry O’Neill confirmed the Board had a quorum before proceeding with the final day’s agenda.

Greenhouse Gas Charge Proposal Discussion and Vote

Kerry O’Neill | EFAB Chair

David Widawsky | Director, EPA Office of the Greenhouse Gas Reduction Fund

Ashley Allen Jones | Senior Finance Advisor, EPA Office of the Greenhouse Gas Reduction Fund

Kerry O’Neill invited David Widawsky and Ashley Allen Jones to summarize the outcomes of their focused group discussions that followed their presentation of the OGGRF’s charge proposal. David Widawsky thanked the Board for their positive reception of the initial proposal. Ashley Allen Jones announced that a revised version of the charge proposal would be submitted to EFAB for further consideration.

The discussions led to a more aligned understanding between the EPA and EFAB with respect to OGGRF's third objective, although some modifications were needed. The initial charge broadly outlined three areas requiring assistance, which, after consultation, were narrowed down with clearer guidelines and more specific questions.

For the proposal's core project typologies, OGGRF has requested that EFAB convene experts in three priority areas: clean energy, net-zero buildings, and net-zero transportation. These experts would help establish baselines within each typology that communities of stakeholders and interested parties will encounter. Regarding the proposal's points on financial leverage, OGGRF clarified its expectations for EFAB to look at both project and enterprise levels, particularly to examine how leverage would work for community lender and direct recipient levels. In terms of scope and scale of private funding and financing, OGGRF was eager to work with actors in the private sector. Ideally, they would consider collaborations alongside public grantees. The office hopes to assess various aspects of private sector involvement, including types of financial leverage, minimum scale and risk requirements, and limitations to participation. This refined approach would be more structured and aim for impactful engagement with public and private partners.

Kerry O'Neill requested further details on the nature of final GGRF deliverables. Rather than a lengthy whitepaper or similar process, OGGRF plans to convene groups comprised of experts within and outside of the grantee pool. OGGRF would work with an exploratory workgroup to ensure any sequence of public discussions would have independent and sufficient neutrality among the representatives. OGGRF's team would then coalesce any final materials.

Kerry O'Neill then opened the floor for discussion.

Lori Collins said that insights about the formation of any exploratory workgroup would be welcomed, especially as the discussion-based format differs from a more traditional written-based one.

Barry Hersh stated that the scope and scale of this project warranted further examination.

Stacy Brown asked for clarification on the core project typologies, specifically about the types of individuals OGGRF envisioned adding to the process (e.g., associations, trade groups). David Widawsky replied that clarifying the types of projects that would be financed with GGRF resources would take priority, highlighting the need to identify current solutions used by organizations in the marketplace for financing such projects. He discussed how these projects might impact private sector capital. Kerry O'Neill added that the exploratory workgroup would work with OGGRF to further refine the typologies.

Gwen Yamamoto Lau asked about the timeline for the deliverable. Ashley Allen Jones replied that they estimated it would take six months, accounting for realistic parameters around the scope of work. Kerry O'Neill added that these would be public discussions through the public notice period. Ed Chu said the commitments of Board members would also be factored in, as most already serve additional workgroups through September and October of this year. He

said that any new exploratory workgroup would need to firmly establish the timing and workload required.

Angela Montoya Bricmont asked whether any of the three project domains were higher priority than others. David Widawsky responded no domain was a higher priority; the three areas interact with one another in different parts of the financing system. Ashley Allen Jones suggested that finalizing the core typologies first could inform exploration around financial leverage and the scope and scale of private financing.

David Wegner expressed appreciation for the focus provided by such prioritization. He asked whether there are timelines associated with funding and whether OGGRF has any expectations of the workgroup to provide tactics or approaches around implementation. Kerry O'Neill clarified that the primary expectation is education related to different types of leverage. David Widawsky confirmed that broader education should be the focus. He noted that grantees and subawardees have seven years to spend their funding, although most prefer an accelerated timeline.

Sanjiv Sinha lauded the efforts of David Widawsky and Ashley Allen Jones, who had turned around four revised drafts of the charge proposal within a day. He asked how OGGRF viewed the role of teams with experts in the three typologies, specifically in working with grantees. David Widawsky stated that they want to encourage grantees to speak about their vision for financing, as well as their strategies for attracting and leveraging private capital markets. By inviting grantees into workshops with experts, OGGRF hopes to have neutral and objective conversations where grantees can receive guidance about different opportunities.

Lori Collins stated it would be helpful for the EPA to identify some questions upfront prior to designing workshops. Kerry O'Neill indicated this would be prudent for the workgroup to explore.

Kerry O'Neill asked whether the group was prepared to vote on forming the exploratory workgroup. Sanjiv Sinha motioned the vote; David Wegner seconded. The vote passed unanimously.

Kerry O'Neill indicated Stacy Brown, Craig Hrinkevich, Barry Hersh, Lawrence Lujan, Sonia Favors, Lori Collins, Jeff Diehl, Eric Hangen, Gwen Yamamoto Lau, Sanjiv Sinha, and Zack Davidson had expressed interest in participating in the workgroup. Lori Collins will act as co-chair. Kerry O'Neill stated that any others interested in joining the workgroup should reach out to Lori Collins or Tara Johnson.

Kerry O'Neill briefly reviewed the exploratory work's anticipated process, highlighting the purpose of refining the charge. Prior to beginning any work, workgroup members should reach out to her, Tara Johnson, and Ed Chu to reach an email vote.

Ed Chu concluded the discussion by thanking Ashley Allen Jones for her previous service to the Board.

Climate Adaptation Financing

Panel Moderator: Lori Collins

Tara Guelig | Sustainability and Impact Director, The Lightsmith Group

Umar Ashfaq | Research Director, MSCI Sustainability Institute

Ed Chu recalled a previous panel that Lori Collins hosted in October 2023 on climate, resilience, and adaptation financing. He expected this panel to be a useful sequel to generate further dialogue within EFAB.

Lori Collins introduced the topic of climate resilience and indicated any subsequent discussion would revolve around the private sector's participation. She emphasized that the discussion would focus on publicly traded companies and private equity as opposed to insurance. She talked about the increasing need to engage the private sector in climate adaptation and resilience. Currently, the private sector only finances less than 5% in these areas, compared to areas of mitigation and decarbonization where the sector contributes over half of all funding. Financing beyond what can be provided by government is needed to address the increasing expense of U.S. climate disasters. A communication gap and lack of understanding of how revenue could be generated from these investments are two key market failures preventing the private sector from engaging.

Tara Guelig described the Climate Resilience Investments in Solutions Principles (CRISP) initiative led in part by the Lightsmith Group. She prefaced a 2022 Climate Policy Institute report indicating that private sector organizations had only invested \$500 million in climate financing globally. The rate of this investment is too slow when compared to current and anticipated needs. However, there are companies that are successfully scaling their efforts to offer solutions.

She noted disconnect in language used by policy makers and implementers. Many initial conversations with chief executive officers (CEOs) resulted in confusion about how these types of investments would be revenue-generating. Using the CRISP framework, the team's hope is to break these language barriers to increase companies' understanding and subsequent engagement. Ultimately, the initiative should link business models of various sizes and stages of development to the ability to address the physical impacts of climate change.

She also said that, given the scope of sectors and companies involved in the climate risk driver space, the initiative should show that an anticipatory opportunity exists. Climate change impacts will be widespread and cross many portions of the economy, society, and environment; investment in resilience and adaptation is therefore prudent. She provided examples of potential adaptation solutions, a range of relevant interventions, and adaptation solutions by sectors. To date, they have identified agriculture, analytics, water management, resilient food systems, supply chain disaster, risk management, and geospatial mapping and imaging for sectors as immediate investment opportunities. She then addressed how to identify companies that fit specific criteria. The private sector offers an opportunity to efficiently deploy these types of solutions. She encouraged the Board to explore the shared slide deck in more detail.

Lori Collins opened the floor for discussion.

Sanjiv Sinha asked for clarification on what the Lightsmith Group does specifically and whether it invests in companies for equity stakes or looks to put money into specific projects. Tara Guelig provided background on the structure of the fund. The fund's largest investor is the United Nations (UN) Green Climate Fund, among other public sector-oriented financial institutions. They also receive philanthropic capital. The fund's mandate is to invest approximately 70% in emerging markets with the remainder in developed countries. She also mentioned the Lightsmith Group has a technical assistance facility that receives grant funding from the U.S. Department of State and the Nordic Development Fund.

Sanjiv Sinha asked what, if any, parameters or requirements the Lightsmith Group had regarding projects selected for investment. Tara Guelig indicated that they search for companies with proven technology, with \$5-100 million in revenue, that align with the Lightsmith Group's notion around resilience. She clarified that companies can receive public funding for these projects, especially in during research and development phases, and that those projects exemplify how layering and sequencing of investment should work.

MaryAnna Peavey asked whether there were criteria in place to assess projects from companies whose missions and operations were misaligned regarding their carbon footprints. Tara Guelig replied that although the fund does not have a threshold for carbon neutrality, they would not move forward with investments of projects that are carbon-intensive, regardless of having solid resilience attributes.

Angela Montoya Bricmont expressed surprise at the minimal amount of private sector investment, since she is routinely approached by private sector individuals presenting new products. She asked for clarification of their perceived barriers. Tara Guelig responded that many of these investments might be reported as general risk management although they could also qualify under the adaptation banner.

Joanne Landau provided a perspective from the real estate sector regarding mitigation and resilience. She estimated that investment from the private sector is higher than the presented 5-10%, and she found it plausible that some investment was being categorized outside of adaptation and resilience.

Umar Ashfaq commented on his work at Morgan Stanley Capital International (MSCI) Sustainability Institute overlaying the CRISP framework with publicly traded companies to identify potential investment candidates. MSCI is a financial services company known for data analytics, their categorization of markets, and their business index. Utilizing their expertise and services that they developed in collaboration with financial managers, they are conducting analyses of companies' publicly available information to identify potential adaptation and resilience investment candidates. They are searching for companies investing in not only their own resilience to climate shocks. Rather, these companies are investing in business offerings that enable their clients and customers to prevent, prepare for, respond to, or recover from climate events.

Using artificial intelligence and human validation, analysts were able to sift through over 9,000 companies' annual reports and regulatory filings for language around adaptation and resilience services. Of these, 827 companies were identified as providing such solutions. The companies are diverse in size, located in both emerging and developed markets, and classified across a range of categories including industrial, material, discretionary, and real estate companies. This is promising as asset managers or financial services often look for products with high levels of coverage and minimal concentrated risk.

Lori Collins pointed out that, despite statements about a lack of private sector investment in adaptation, this may not be the case. These 827 companies are publicly traded and already offering adaptation solutions. To date, there has not been a way to determine what percentage or amount of revenue the companies are putting toward such solutions, but the base finding is an optimistic one.

Umar Ashfaq revisited the topic on determining companies' adaptation offerings versus any actions detrimental to the climate. Many of these companies produce multi-use products (e.g., concrete pipes). Such products may be useful in preventing or recovering from climate events but may also be used in capacities harmful to the environment (e.g., production, or use in carbon-intensive industries). At this time, MSCI is still developing methods by which to differentiate companies, especially commodity producers making such multi-purpose products.

Ed Chu asked about the reception this presentation has gotten from various audiences, as well as further comment on the nature of the gap seen between public and private sector investments. Tara Guelig replied that although they are still in the early phases, acceptance of and enthusiasm about these types of investments is growing. She cautioned that delays in investment would likely continue while technological advancements catch up and implementation partners establish themselves. She added that as demand for companies to identify their climate resilience risks grows, they will also seek ways to minimize risks.

Umar Ashfaq added that he would like to see an analysis of where capital is flowing to better understand what and where the most pressing needs in terms of investment are. This could link what companies are offering to what countries need. Ed Chu felt this was an important factor, considering that adaptation is likely to be very locally centralized.

David Wegner commented on the human propensity to quickly move on following a disaster and suggested this may be why agencies struggle with proposing and implementing nature-based solutions. He asked what could be done to kickstart these types of investments—for instance, there may be flagging due to an issue in leadership, because a critical mass of disasters hasn't been reached, or a learning curve that hampers action. Tara Guelig replied it was due to all of these issues, noting that since adaptation can be so localized, it could become a bipartisan issue. Ed Chu added there is a disparity in responses to changing impacts with temporary versus permanent measures.

Lori Collins thanked Tara Guelig and Umar Ashfaq for their presentation.

Water Reuse Workgroup

Angela Montoya Bricmont | Workgroup Chair

Justin Mattingly | EPA Office of Science and Technology, Office of Water

Angela Montoya Bricmont provided an update on the investment tax incentive for water reuse infrastructure. She introduced Justin Mattingly from the EPA to describe the charge and update the Board on progress made to date and future plans.

Justin Mattingly provided context around the history and purpose of the workgroup. The Water Reuse Program began in 2020 with the establishment of the National Water Reuse Action Plan. Within a few years, Congress established the Water Reuse Interagency Working Group to develop better connections across federal agencies with respect to water reuse. The workgroup was directed to conduct a study on potential public benefits of private investment tax incentives for water recycling, which they interpreted as applied scenarios of industrial reuse (e.g., server farms using recycled water to cool their facility). An investment tax credit would incentivize reusing the resource, thereby alleviating strain on regions grappling with water issues. He further explained the charge, indicating it should determine public health benefits arising from such incentives, and address specific questions needed to craft this tax credit.

Angela Montoya Bricmont referred to the previous presentation on adaptation and resilience, stating that water reuse is an excellent example of industry driving innovation as it searches for ways to build more resilient structures, particularly in water-stressed areas. She described themes the workgroup had heard from industry, including questions on payback requirements, certainty around local requirements and regulations, and approval chances. The distinct environmental and regulatory conditions in different localities make this a challenging topic to tackle. She noted that while upfront costs may not be the biggest barrier, the cost of ongoing maintenance for reuse systems and infrastructure may be dissuading some investments. She described next steps, including receiving feedback from a broader group, hosting a listening session, and conducting case study work. She then opened the floor for discussion.

David Wegner said he viewed this charge as building on what the EPA has already done with respect to reporting. The challenge itself will not become easier, and he stressed the need to continue investing in knowledge first ahead of making policy decisions.

Dennis Randolph complimented the workgroup on their engaging session and emphasized the need to distill ideas the workgroup generated to increase accessibility, especially for local officials. Justin Mattingly replied that this would be one of the next steps and that any ideas would be presented in manageable outlines rather than dense reports.

MaryAnna Peavey talked about a company that had been reticent to describe the total cost involved in retrofitting one of their agricultural processing facilities for reuse. Recognizing the renovation occurred many years ago, she asked if private sector companies would be more willing to share such information now. Justin Mattingly stated a company adopting greater transparency around such data is unlikely. He also expects diverse responses from companies

due to their specific considerations around incentives. Sharon Nappier, the National Program Lead at the EPA for water reuse, clarified that data sharing went beyond cost information and can include information for permitting. She specified data sharing as a large barrier and recommended that the EPA should help states address it.

Stacy Brown commented he had found it useful to focus on a selection of industries when tasked with addressing a broad issue and suggested defining easy returns before examining more complex industries. He then asked if the workgroup would consider providing regulatory relief to companies cooperating with information disclosure as they figure out reuse. Justin Mattingly stated that regulatory relief would be outside the scope of the workgroup.

Kerry O’Neill asked for a final update on deliverables and immediate next steps. Angela Montoya Bricmont talked about their upcoming work with listening sessions and case studies. The workgroup will begin drafting a benefits document to bring back to the Board for a vote. They have refined deliverables to focus on Congress’ charge regarding benefits instead of the design of tax credits.

Ed Chu asked for clarification on any timeline set forth by Congress. Justin Mattingly said that any initial, limited time requirement around planning has been accomplished. The workgroup is currently waiting on a timeframe for a final report and their goal is to have any report finished within the calendar year. Ed Chu then expressed concern after having heard some discussions about the complexities around local challenges, suggesting that the Board cannot provide guidance about issues that are not related to finances.

Ed Chu thanked the workgroup for their hard work. Kerry O’Neill asked the workgroup to reach out to the Board if they needed any assistance.

EPA Office of Agriculture and Rural Affairs

Venus Welch-White | Acting Deputy Director, and Farm, Ranch, and Rural Communities Committee Designated Federal Officer, EPA Office of Agriculture and Rural Affairs

Venus Welch-White provided a brief update on the establishment of a new Office of Agriculture and Rural Affairs. Rod Snyder will lead the political side of the office while Venus Welch-White is currently the Acting Deputy Director. She stated the office will employ approximately ten career employees. She applauded the decision, indicating it is an important step to providing agriculture and rural communities a seat at the table. She clarified that the Farm, Ranch and Rural Communities Federal Advisory Committee (FRRCC) will still fall under this office, although there will be more collaboration with their program offices.

She then provided update on progress made since October 2023, when opportunities for the FRRCC to collaborate with EFAB had been discussed. The FRRCC’s current charge is the intersection of agriculture and climate change. They have three ad hoc workgroups (two of the previous four workgroups merged): the Water Energy Climate Nexus workgroup; a workgroup on climate adaptation and mitigation; and a climate, finance, social inclusion and technical

assistance workgroup. Broadly, the FRRCC is examining opportunities to expand and seeking technologies they can support.

Venus Welch-White then provided an overview of the Committee’s immediate plans. They are planning a meeting for summer 2024 during which they will finalize the last set of recommendations to pursue. They will consider this through a public/private partnership lens, especially around creative financing. She indicated that there had been exploratory conversations about ways to integrate E5 or economy, efficiency, environment, energy, and employment. She foresees the FRRCC potentially needing expertise and collaboration for a joint work product this fall. She then opened the floor for discussion.

David Wegner emphasized how important the FRRCC’s work was for supporting smaller farmers often overshadowed by corporate organizations. Venus Welch-White thanked him for his input and perspectives.

Craig Hrinkevich expressed enthusiasm about engaging with the Committee on upcoming topics like public/private partnership.

Angela Montoya Bricmont asked if the FRRCC’s work considers or touches on innovation occurring around the Colorado River as a result of regional climate impacts. Venus Welch-White responded that the Committee broadly considers these issues at a national level. They are, however, starting to explore challenges with a regional perspective in mind.

MaryAnna Peavey said that she hoped the FRRCC would keep the Clean Water SRF in mind as it considers which individuals and entities to bring to the table. She also cautioned that making new sources of funding available can hamper communities’ abilities to implement funding well because they do not always have enough staffing or capacity.

Venus Welch-White said that they will be standing up a subcommittee under the FRRCC relatively soon. It will be the Animal Agricultural Water Quality Subcommittee and will have its own charge topic. Members have not yet been named.

Kerry O’Neill thanked Venus Welch-White for her updates and expressed excitement at future collaboration.

Public Comment

Edward H. Chu | EFAB Designated Federal Officer

Ed Chu opened the floor to any comments from the public, designating time for both public messages and follow-up questions or concerns from the Board.

Dionna Brown, National Director for Youth Environmental Justice Programs for Young, Gifted & Green, provided a public comment. She strongly urged the EPA and EFAB to prioritize environmental and restorative justice projects for affected communities. She cited the Flint, Michigan water crisis and stated that, despite federal funding, the city has failed to replace a number of lead service lines. The racial and economic disparities and lack of regulatory

oversight are preventing local communities from accessing clean and safe drinking water. She stated it was imperative for financing to align with Justice40 principles and entities.

She also implored the EPA to recommend increased long-term, economically viable water infrastructure and investment plans to address aging systems in disproportionately affected communities. Technical assistance should be readily available and prioritize communities in need. She also advocated for increased community engagement to foster trust. She suggested that the EPA strengthen monitoring and enforcement efforts, since not only are these essential to upholding justice and accountability, but they can also prevent future environmental disasters. Lastly, she encouraged the EPA to promote long-term planning and resilience strategies to ensure equitable access to clean water during crises.

Kerry O’Neill thanked Dionna Brown for her comments, stating that she described many critical issues and themes that continue appearing in EFAB’s discussions, even if specific examples may not.

Ed Chu added that Dionna Brown’s comments would be shared and referred to CFO Gregg Trembl’s discussion on April 11 during which the EPA’s request for additional funding for emergency response for water emergencies was discussed.

Closing Thoughts

Edward H. Chu | EFAB Designated Federal Officer

Kerry O’Neill | EFAB Chair

Kerry O’Neill provided short closing thoughts. First, she reflected on the conversations around TA that resulted in EFAB considering submitting a letter to the EPA Administrator. A small group will be drafting a copy to circulate with the Board, pending approval from Ed Chu. She stated that Board members should look for an email with that draft language. Second, she stated they would be focusing on the two water charges deliverables to vote on in October. A virtual meeting will take place in August or September to review draft materials.

Ed Chu reminded the Board of administrative notices, primarily that new members will be starting in October. The process of selecting new members is still ongoing. He concluded by thanking Board members and EPA representatives and adjourned the meeting.