OVERSIGHT OF EPA AND DOE SPENDING

Implementing Remaining GAO Recommendations Could Help Address Identified Challenges

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Testimony

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Highlights of GAO-25-108135, a testimony before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

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Why GAO Did This Study

The IIJA and IRA provided billions of dollars in funding to federal entities, including EPA and DOE.

This testimony discusses the status of programs created or expanded with funds under the IIJA and IRA and related challenges. Specifically, the statement discusses (1) EPA, (2) DOE, and (3) key issues looking ahead.

This testimony is based on prior GAO work and more recent work reviewing new and expanded programs from the IIJA and IRA. It is also based on preliminary observations from ongoing work reviewing EPA's use of IRA appropriations, where GAO analyzed EPA data and documentation, and interviewed EPA officials. GAO's prior work was issued from 2007 through 2024. Details on GAO's methodology can be found in each of the 22 reports cited throughout GAO's statement for this hearing.

What GAO Recommends

Across 22 reports from 2007 to 2024, GAO has made a total of 60 recommendations to help address identified challenges at EPA and DOE discussed in GAO's statement for this hearing. The agencies have implemented 43 of these recommendations. GAO maintains that implementing the remaining recommendations could help address programmatic challenges.

What GAO Found

The Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act of 2022 (IRA) provided billions of dollars in funding to the Environmental Protection Agency (EPA) and the Department of Energy (DOE). This funding is for grants and programs supporting clean energy research and development, water and infrastructure investments, and other purposes. GAO has identified challenges in various aspects of certain programs that received significant funding through this legislation.

EPA. The IIJA provided over $43 billion for State Revolving Fund (SRF) water infrastructure programs. As of January 2025, EPA had fully obligated funds to six states and had not yet obligated any funding to eight states for fiscal year 2024.The status of funds for the remaining states was mixed. The IRA also provided about $41.5 billion for grants to reduce greenhouse gas emissions and enhance climate resilience. As of January 2025, EPA had obligated about $40 billion (96 percent), and about $20 billion (49 percent) of its IRA appropriations had been expended. GAO has recommended ways EPA could improve grants monitoring, including improving financial indicators for the SRFs, and address workforce challenges affecting grants management. EPA has implemented 24 out of 29 of these recommendations.

DOE. DOE’s Office of Clean Energy Demonstrations (OCED) and Loan Programs Office (LPO) are responsible for billions of DOE’s IIJA and IRA funding.

- **OCED.** DOE established OCED in 2021 to manage about $27 billion in IIJA and IRA funding. As of January 2025, OCED had awarded about 140 projects and obligated about $1.6 billion. In 2024, GAO found that OCED did not have a strategic workforce plan despite needing to fill about 100 more positions to be fully staffed. GAO made recommendations including that OCED develop such a workforce plan. OCED has lost staff since the 2024 report, and GAO is monitoring OCED’s efforts to implement the recommendation given current agency priorities.
- **LPO.** The IIJA and IRA provided LPO over $350 billion in new loan authority for energy-related ventures and added two new programs to the office’s three active programs. After experiencing a substantial increase in applications for LPO’s programs starting in 2021, the office increased the number of loans and loan guarantees it closed in the last quarter of calendar year 2024. Loans and guarantees closed in that quarter ($24.4 billion) account for about half of the total that the office has closed under its five current programs since they were established ($52.5 billion). GAO has reported on the importance of monitoring loans and guarantees after they are closed to proactively manage their risks and protect the financial interests of the federal government and the taxpayer.

GAO has previously reported that there are risks involved with major new programs, especially when funding is awarded on a compressed schedule. GAO has additional ongoing work examining various aspects of how EPA and DOE are spending the funds they received in the IIJA and IRA.

Chairman Palmer, Ranking Member Clarke, and Members of the Subcommittee:

Thank you for the opportunity to discuss our work related to how the Environmental Protection Agency (EPA) and Department of Energy (DOE) are using funds appropriated by the Infrastructure Investment and Jobs Act (IIJA)[1] and the Inflation Reduction Act of 2022 (IRA) for new and expanded programs.[2]

These two acts provided billions in multi-year funding to federal entities—including EPA and DOE. This funding is for grants and programs supporting clean energy research and development, water and infrastructure investments, and climate resilience, among other purposes.[3]

For EPA, new funding through the IIJA included over $50 billion for water infrastructure and other investments, while the IRA included about $41.5 billion in funding for greenhouse gas reduction and other programs.[4] For DOE, funding included over $60 billion for a broad range of energy and other investments under the IIJA, and hundreds of billions in loan authority under the IRA and IIJA.

The new funding represented a significant increase for both of these agencies. In recent years EPA's average annual appropriation has been about $8.8 billion per year, and DOE's non-defense appropriation has been about $15.5 billion per year.[5]

GAO testified before this subcommittee in March 2023 regarding lessons for overseeing agency spending and addressing long-standing challenges associated with some of the programs that received significant funding through the IIJA and IRA.[6] Since that testimony, we have examined aspects of how EPA and DOE have spent appropriations received in the IIJA and IRA.

This statement addresses the status of EPA and DOE programs created or expanded with funds from the IIJA and IRA, and prior recommendations we have made to address related challenges we have identified. Specifically, the statement discusses (1) EPA, (2) DOE, and (3) key issues looking ahead.

[1]Pub. L. No. 117-58, 135 Stat. 429 (2021).

[2]An Act To provide for reconciliation pursuant to Title II of S. Con. Res. 14," Pub. L. No. 117-169, 136 Stat. 1818 (commonly known as the Inflation Reduction Act).

[3]As of January 20, 2025, all federal agencies were directed to pause disbursements of funds under the IRA and IIJA. Exec. Order No. 14,154, 90 Fed. Reg. 8,353, 8,357 (Jan. 29, 2025).

[4]EPA received over $43 billion for the State Revolving Fund programs and about $7 billion for other investments.

[5]This average is based on EPA's annual appropriations for fiscal years 2014 through 2024. During this period, EPA's annual appropriations ranged from a low of about $8.1 billion in fiscal year 2017 to a high of about $10.1 billion in fiscal year 2023. For DOE, this average is based on the agency's non-defense annual appropriation for fiscal years 2020 through 2024. DOE's total defense and non-defense annual appropriations averaged $44 billion for these years.

[6]GAO, *Oversight of Agency Spending: Implementing GAO Recommendations Could Help Address Previously Identified Challenges at Commerce, DOE, and EPA,* GAO-23-106726 (Washington, D.C.: Mar. 29, 2023).

This statement is based on 22 of our prior reports and testimonies reviewing EPA and DOE programs IIJA and IRA created or expanded from 2007 through 2024, as well as on preliminary observations from our ongoing work reviewing EPA's use of IRA appropriations. The statement is also based on updates on the status of EPA and DOE spending for selected programs we reviewed using publicly available information that we discussed with the agencies.

A detailed discussion of our objectives, scope, and methodologies, including our assessment of data reliability, is available for each of the prior reports we cite throughout this statement. For our ongoing work, we are examining how EPA obligated and expended IRA appropriations, made decisions regarding its use of IRA appropriations, and how EPA is overseeing its use of IRA appropriations. To complete this work, we are analyzing EPA data on its IRA obligations and expenditures, as well as reviewing documentation and interviewing EPA officials about their decisions for using IRA appropriations and their actions to oversee to them.

We conducted the work upon which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Status and Challenges Identified in EPA's Management of Various Programs

We have issued 10 reports identifying challenges in various aspects of certain EPA programs related to water infrastructure, air quality, and grants. Our 10 reports included a total of 29 recommendations to EPA and one matter for congressional consideration to address these challenges. EPA has implemented 24 of the recommendations. The matter for congressional consideration has not been implemented. This section discusses EPA's State Revolving Fund programs, air quality monitoring programs, and grants management. It also addresses EPA's use of IRA appropriations and oversight of IRA spending.

Clean Water and Drinking Water State Revolving Fund Programs

Through the federal Clean Water and Drinking Water State Revolving Fund (SRF) programs, EPA provides annual grants to states to capitalize state-level SRF programs that make loans for drinking water and wastewater infrastructure projects. The IIJA provided over $43 billion to EPA across five funding streams, which the agency is providing to state SRF programs.[7] This funding is being allocated to states using formulas prescribed by law. When the capitalization grants are awarded, the funds are then obligated by EPA to states. As of January 2025, EPA reported on its website that most fiscal year 2022 and fiscal year 2023 grants had been awarded, with eleven states partially funded or not yet funded in at least one of the five funding streams. For fiscal year 2024, EPA reported that six states had been fully awarded funding across all five funding

[7]The IIJA provided appropriations to the SRF programs for 5 years, fiscal years 2022–2026, across five funding streams, including over $23 billion for the SRF general programs, $15 billion for lead service line replacement, and $5 billion to address emerging contaminants. A portion of the funds is transferred to the EPA OIG for oversight.

streams, and eight states had received no awards.[8] The status of funds for the remaining states was mixed, with full or partial awards from some funding streams.[9]

EPA has implemented our two recommendations to enhance its monitoring and oversight of SRF funds. In 2015, we identified the need for better financial indicators to monitor the sustainability of SRF funds.[10] One of our recommendations was that EPA should update its financial indicators guidance to include better information on the overall growth of state SRF funds. EPA addressed this recommendation in 2018, directing its regional managers to use new indicators in their review of state SRF programs. With these new indicators, EPA has been better able to support oversight and management of SRF fund growth.

In our prior work, we identified a number of factors that can affect the spending of SRF funds. For example, some communities have limited technical and financial capacity, which makes it difficult to assess their water and wastewater project needs or use the funding available from programs such as the SRFs.[11]

In 2024, we recommended that Congress consider revising the allotment formula for the Clean Water SRF program to clearly align with the program's goals and to require EPA to periodically calculate allotment percentages using the most recent data.[12] A panel of experts we convened recommended focusing allotment criteria on states' clean water needs, as well as on population and poverty. We reported that by taking actions such as sampling the needs of small communities and providing tools to estimate needs for noncentralized projects (e.g., nonpoint source pollution or stormwater controls), EPA could improve the results of its needs estimates. Based on these findings, we recommended that EPA take actions to improve the collection of Clean Water needs through its periodic surveys. EPA agreed with the three recommendations we made and has begun taking steps to address them. We are continuing to monitor their efforts to fully address the recommendations.

The EPA's Office of Inspector General (OIG) has published a number of reviews of the IIJA SRF funding and continues to review how the funds are being spent.[13] For example, in February 2025, the OIG reported that

[8]EPA officials said that grant awards change on a monthly basis, and numbers reflected on the EPA website were based on the awards made at the time of posting.

[9]To receive a capitalization grant, a state must apply for funding and prepare a plan that describes how it intends to use the SRF program funds, as well as how those uses support the overall goals of the SRF program. EPA officials said that, by law, states have up to 2 federal fiscal years of the appropriation to request and receive their capitalization grant award.

[10]GAO, *State Revolving Funds: Improved Financial Indicators Could Strengthen EPA Oversight*, GAO-15-567 (Washington, D.C.: Aug. 5, 2015). In 2015, we examined the financial indicators that EPA regions use in their reviews of states' SRF performance and compared them with leading financial management practices. We found that the financial indicators that EPA regional offices used as part of their annual reviews of SRF programs' performance did not demonstrate the financial sustainability of states' programs or project their future lending capacity.

[11]See GAO, *Drinking Water and Wastewater Infrastructure: Information on Identified Needs, Planning for Future Conditions, and Coordination of Project Funding*, GAO-17-559 (Washington, D.C.: Sept. 20, 2017).

[12]GAO, *Clean Water: Revolving Fund Grant Formula Could Better Reflect Infrastructure Needs, and EPA Could Improve Needs Estimate*, GAO-24-106251 (Washington, D.C.: July 19, 2024). As of February 2025, Congress had not yet taken actions to address the recommendation.

[13]For example, see EPA Office of Inspector General, Infrastructure Investment and Jobs Act Oversight Plan—Year Three, 24-N-0036 (Washington, D.C.: May 6, 2024).

EPA guidance on the Drinking Water SRF Emerging Contaminants funds could more clearly identify criteria for non-PFAS contaminants.[14] We continue to coordinate with the OIG on IIJA and other work.

Air Quality Monitoring

The IRA appropriated over $170 million to EPA for grants and activities related to air quality monitoring and deploying air quality sensors.[15] EPA and state and local agencies jointly manage the national ambient air quality monitoring system, which provides information that is essential for supporting Clean Air Act implementation and managing public risks from air pollution. EPA provides federal funding for the system through grants to tribal, state, and local air agencies. In addition, EPA has provided grants for community air monitoring projects conducted by groups including nonprofit organizations and tribal, state, and local agencies.[16] According to EPA officials, more than half of these projects planned to use lower cost air quality sensors.

In November 2020, we reported that air quality managers, researchers, and the public need additional information not currently provided by the air quality monitoring system to better understand and address health risks from air pollution.[17] In the report, we recommended that EPA, in consultation with state and local air agencies, develop and make public an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public.[18] EPA officials said that as of December 2024, the agency was actively engaging with tribal, state, and local air agencies and drafting an air quality monitoring modernization plan. In addition, EPA officials told us that the agency is using appropriations it received through the IRA, as well as through the American Rescue Plan Act of 2021, to enhance monitoring of certain air pollutants and fund air monitoring projects in communities across the United States. These officials said that the investments will help address the air quality monitoring information needs identified in our 2020 report. We are continuing to monitor EPA's efforts to address our recommendation.

EPA Grants Management

In addition to grants for SRF funds, air quality monitoring, and related activities, EPA provides grants under numerous programs for a wide variety of purposes, including improving children's health, small business innovation research, and brownfields clean-up. We have issued five reports on EPA's grants management

[14]EPA Office of Inspector General, EPA Guidance Addresses Implementation Requirements for Infrastructure Investment and Jobs Act for Drinking Water State Revolving Fund Emerging Contaminants Funding, but Clarification Is Needed Before More States Spend Funds, 25-P-0015 (Washington, D.C.: Feb. 12, 2025).

[15]*See* Pub. L. No. 117-169, § 60105(a)-(c), 136 Stat. 1067 (2022).

[16]In November 2022, EPA announced the selection of 132 air monitoring projects in 37 states to receive $53.4 million in funding from the American Rescue Plan Act of 2021 and the IRA to enhance air quality monitoring in communities across the United States.

[17]GAO, *Air Pollution: Opportunities to Better Sustain and Modernize the National Air Quality Monitoring System*, GAO-21-38 (Washington, D.C.: Nov. 12, 2020).

[18]We also recommended that EPA, in consultation with state and local agencies, develop, make public, and implement an asset management framework for consistently sustaining the national ambient air quality monitoring system. EPA fully addressed the recommendation after finalizing an asset management framework in January 2024. Air quality monitoring on tribal lands was outside the scope of our 2020 report on air quality monitoring, GAO-21-38.

since 2015, and EPA has implemented 21 of 22 of our recommendations.[19] For example, we previously recommended that EPA develop clear guidance for tracking grants and determine how to make more complete information on discretionary grants publicly available.[20] EPA implemented both of these recommendations.

We also previously identified opportunities for EPA to improve grants monitoring. As of 2023, EPA had implemented nine of 10 of our recommendations made in two prior reports for improving grants monitoring, including by migrating to a new, comprehensive web-based IT system in December 2020.[21] Additionally, we reported on workforce challenges affecting EPA's grants management. EPA implemented all 10 of our recommendations in this area, including developing a process for collecting and analyzing data on staffing for grant officers.[22]

EPA's IRA Spending

The IRA provided EPA with about $41.5 billion for grants and other investments to reduce greenhouse gas emissions and enhance climate resilience across the nation. Our analysis of provisional EPA data shows the agency obligated nearly all the funds and about half was expended. As of January 20, 2025, EPA had obligated about $39.7 billion (96 percent) and about $20.3 billion (49 percent) of its IRA appropriations was expended.[23]

EPA obligated about 70 percent of the appropriations in fiscal year 2024 and another 26 percent in fiscal year 2025. The IRA appropriations directed EPA to establish several new grant programs and support other ongoing efforts.

[19]EPA's Office of Inspector General (OIG) has also examined the agency's grants management. For example, in 2022, the OIG issued considerations for EPA's implementation of grants through the Infrastructure Investment and Jobs Act. OIG officials used prior OIG and GAO findings that indicated deficiencies in EPA's administration and oversight of grants to inform these considerations. See Environmental Protection Agency, Considerations for the EPA's *Implementation of Grants Awarded Pursuant to the Infrastructure Investment and Jobs Act*, Report No. 22-N-0055 (Washington, D.C.: Aug. 11, 2022).

[20]GAO, *Grants Management: EPA Has Taken Steps to Improve Competition for Discretionary Grants but Could Make Information More Readily Available*, GAO-17-161 (Washington, D.C.: Jan. 23, 2017).

[21]For example, in 2015 we found that EPA faced challenges monitoring compliance with grant management directives agency-wide, including limited electronic records and analytical capabilities of its IT systems. See GAO, *Grants Management: EPA Has Opportunities to Improve Planning and Compliance Monitoring,* GAO-15-618 (Washington, D.C.: Aug. 17, 2015). In addition, in 2016, we found that EPA could improve certain monitoring practices to ensure that grants achieve environmental and other program results. See GAO, *Grants Management: EPA Could Improve Certain Monitoring Practices*, GAO-16-530 (Washington, D.C.: July 14, 2016).

[22]For example, in 2017, we found that staffing levels for grants management personnel had declined over time and that EPA only partially followed leading practices for strategic workforce planning related to grants management. See GAO, *Grants Management: EPA Partially Follows Leading Practices of Strategic Workforce Planning and Could Take Additional Steps*, GAO-17-144 (Washington, D.C.: Jan. 9, 2017). In addition, in 2020 we identified staffing challenges for EPA personnel working on tribal grants, including heavy workloads and high turnover. See GAO, *EPA Grants to Tribes: Additional Actions Needed to Effectively Address Tribal Environmental Concerns*, GAO-21-150 (Washington, D.C.: Oct. 20, 2020).

[23]In federal budgeting, the term obligation refers to a legal liability to pay for goods and services the federal government ordered or received. Specifically, obligation refers to a definite commitment that creates a legal liability for the payment of goods and services ordered or received or a legal duty on the part of the United States that could mature into a legal liability by virtue of actions on the part of the other party beyond the control of the United States. The standards for the proper reporting of obligations are found in section 1501(a) of title 31 of the United States Code. An expenditure is the actual spending of money—that is, the issuance of checks, disbursement of cash, or electronic transfer for funds—to liquidate a federal obligation.

EPA's Greenhouse Gas Reduction Fund

EPA has obligated nearly 100 percent of the $27 billion provided by the IRA for the new Greenhouse Gas Reduction Fund, which is the largest amount of appropriations provided to EPA under the IRA. EPA obligated appropriations for the fund before they expired on September 30, 2024, and about $20 billion has been expended so far. To implement the fund, EPA created a new program office and established three subprograms for making competitive grants: the $14 billion National Clean Investment Fund, the $6 billion Clean Communities Investment Accelerator, and the $7 billion Solar for All program.

Two of the subprograms—the National Clean Investment Fund and the Clean Communities Investment Accelerator—have made awards obligating about $20 billion of their combined funds. EPA officials stated that nearly all $20 billion has been expended by depositing the funds for the two subprograms with a U.S. Treasury-designated commercial bank acting as EPA's financial agent.[24] The financial agent will provide commercial banking and financial services for the grant awardees for these two subprograms.

- The National Clean Investment Fund awarded grants to three recipients to establish national-scale financial institutions to provide financing for low- and zero-emissions technology projects nationwide.
- The Clean Communities Investment Accelerator awarded grants to five recipients to provide funding and technical assistance to community lenders operating in low-income and disadvantaged communities for the purpose of providing financing for projects that reduce or avoid greenhouse gas emissions.

The third subprogram, the Solar for All program, awarded its $7 billion to a total of 60 grantees to expand existing and develop new low-income solar energy programs nationwide. EPA has obligated 100 percent of these funds and about $6.1 million (less than 1 percent) has been expended.[25]

Similar to other EPA grant programs, the agency's oversight of grant recipients includes several performance reporting requirements, such as requiring recipients to report progress on achieving outcomes and outputs outlined in their workplans. Recipients are responsible for ensuring that any subrecipients also comply with grants' terms and conditions, including reporting performance to EPA. Program beneficiaries—that is, the final recipients of grant funds that implement emission-reduction projects—are generally not subject to the same EPA terms and conditions as the grant recipients or subrecipients. Grant recipients or subrecipients impose terms and conditions for performance and reporting in their assistance agreements with beneficiaries. EPA recently finalized what performance information grant recipients will be required to report. The required information includes semi-annual, annual, and final progress reports; organizational disclosures; transaction- and project-level reports; and, for the Solar for All program, drawdown reports. The progress reports are to provide qualitative and quantitative information on key activities completed by recipients, show annual spending trends, and summarize outputs and outcomes achieved.

[24]This funding arrangement differs from EPA's customary funding model, where funds obligated to grantees remain in the U.S. Treasury until they are disbursed. According to agency documentation, EPA chose this model to provide adequate capitalization to the recipients as required by the IRA and ensure the funds are used in a timely manner to fulfill the purposes of the grants. We are examining this arrangement in our ongoing work.

[25]To select recipients, all three subprograms developed eligibility requirements and evaluation criteria that reviewers used to assess each application. Review panels consisting of EPA staff and subject matter experts from across the federal government reviewed, scored, and ranked each application on these criteria. EPA officials told us that emissions reduction was a key evaluation criterion, and that EPA evaluated applicants on this and other key criteria on a per dollar basis to ensure comparability.

EPA officials we interviewed for our ongoing work told us they had not yet developed program-level performance goals and measures for the three subprograms. They said they first intended to collect evidence on each recipients' progress toward the program's three overarching objectives—that is, (1) reducing emissions of greenhouse gases and other air pollutants; (2) delivering benefits of greenhouse gas- and air pollution-reducing projects to American communities, particularly low-income and disadvantaged communities; and (3) mobilizing financing and private capital to stimulate additional deployment of greenhouse gas- and air pollution-reducing projects. EPA officials stated that each recipient had performance goals and measures established in their workplans, and that EPA was closely monitoring their progress. However, EPA officials also told us they would need to collect evidence for 1 or 2 years before they could set program-level performance goals and measures for the three subprograms.

EPA's Other Appropriations

The remaining amount of EPA's total IRA appropriation (about $14.5 billion) is spread across various sections. As of January 20, 2025, per provisional agency data, EPA had obligated about $12.7 billion and about $327.6 million had been expended. These appropriations are set to expire between fiscal years 2026 and 2031. The appropriations include, for example, $5 billion for Climate Pollution Reduction Grants (98 percent obligated) and $3 billion for Grants to Reduce Air Pollution at Ports (98 percent obligated). EPA divided programmatic and oversight responsibility for these appropriations among several of its existing program offices, and EPA plans to use its regular grants management process for overseeing these awards. To administer and oversee its IRA grants, EPA officials told us they follow the same general body of guidance based on law and regulations used to implement and manage all other EPA grant programs. As discussed earlier, we have reported on EPA's grants management for years.

Status and Challenges Identified in DOE's Management of Clean Energy Demonstrations and Loan Programs

We have issued 12 reports identifying challenges associated with DOE's Office of Clean Energy Demonstrations (OCED), Loan Programs Office (LPO), and other programs. Our 12 reports included a total of 31 recommendations and two matters for congressional consideration to address these challenges. DOE has implemented 19 of the recommendations. One matter for congressional consideration has been implemented and one has not been implemented.

Office of Clean Energy Demonstrations

DOE established OCED in December 2021 to manage a historic amount of appropriated funding for clean energy demonstration projects. Such projects are intended to help lower the investment risks of new technologies and allow for additional private investment and commercialization of such technologies.

DOE was appropriated in the IIJA and IRA about $27 billion for fiscal years 2022 through 2026 to fund OCED-managed clean energy demonstration projects.[26] This funding covers eight portfolio areas including $8 billion

[26]This total also includes appropriations and repurposed unobligated balances in recent annual appropriations acts.

for Regional Clean Hydrogen Hubs, about $7 billion for carbon capture and storage and direct air capture projects, and about $3 billion for advanced nuclear projects.

When establishing OCED, the office hired staff and developed or modified policies and procedures as it announced, evaluated, and awarded projects. In November 2024, we reported that OCED had awarded over 130 projects, committed about $18.8 billion to these projects, [27] and obligated about $1.6 billion to them.[28] From the time we issued our report through mid-January 2025, OCED finalized negotiations and awarded an additional 37 projects that had been previously selected. OCED obligated about $222 million to these awards.[29]

In our November 2024 report, we also found that OCED had been responsive to some of our relevant prior recommendations. Specifically:

- **Program design.** In a 2021 report, we recommended that the Office of Fossil Energy and Carbon Management (FECM), which previously managed carbon capture projects that are similar to those currently managed by OCED, improve its processes for carbon capture and storage demonstrations. Specifically, we recommended that FECM adopt a down-selection process—whereby DOE would select certain projects for initial funding and further review, and then select a subset of those projects for full funding.[30] We found that FECM had fully committed to some projects at their initial selection, which increased the risk of funding unsuccessful projects.

  Instead of a down-selection process, in general, OCED sought to reduce the risk of funding unsuccessful projects by building in go/no-go decision points into its awards.[31] Specifically, for demonstration programs, awardees must meet established project milestones before they are able to advance to subsequent phases, according to OCED documents.

  This approach is similar to how FECM structured the carbon capture and storage awards we reviewed in our 2021 report. However, in our November 2024 report, OCED officials said that their approach to the go/no-go decisions will be more rigorous and include outside independent review. While OCED's intended actions are steps towards addressing our recommendation, we continue to monitor the extent to which OCED's use of decision points is more effective than we found it to be in our 2021 report.

[27]Committed means here the total federal cost share amount for the full selected or awarded project (as identified in selection or award documentation). For awards with multiple phases, this represents the full federal amount if the project successfully meets all milestone requirements to advance to subsequent phases and is subject to future award negotiations at the end of each phase.

[28]GAO, *Clean Energy: New DOE Office Should Take Steps to Improve Performance Management and Workforce Planning,* GAO-25-106748 (Washington, D.C.: Nov. 14, 2024).

[29]A significant portion of these funds were concentrated in three large awards under the Hydrogen Hubs portfolio. Specifically, OCED obligated about $60.8 million to three Hydrogen Hub awards finalized from November 2024 through January 2025.

[30]GAO, *Carbon Capture and Storage: Actions Needed to Improve DOE Management of Demonstration Projects*, GAO-22-105111 (Washington, D.C.: Dec. 20, 2021).

[31]OCED adopted a process similar to down-selection for one of its 17 programs.

- **Project selection.** In our May 2024 report, we recommended that FECM ensure that it adheres to guidance and only select projects that are deemed to be technically acceptable.[32] We had found that FECM had selected and awarded a project even though its technical score did not meet the office's established threshold. In our November 2024 report, we reviewed the awards OCED issued through July 2024 and found that OCED had only selected projects that met the technically acceptable criteria.
- **Award negotiations.** In our 2021 report, we also reported that DOE used expedited time frames to negotiate some projects—fewer than 3 months—based on DOE's desire to begin spending funds quickly. We found that these actions reduced DOE's ability to identify and mitigate technical and financial risks. We recommended that future carbon capture and storage demonstrations allow adequate time for negotiations prior to entering cooperative agreements. In our November 2024 report, we found that the time from project selection to award for some of OCED's larger awards was from about 7 months to 13 months, according to OCED's selection and award announcements.[33] For the 37 OCED awards issued since our November 2024 report, negotiations took on average about 10 months, ranging from about 7 months to 15 months. While DOE has made progress towards addressing our recommendation, this recommendation has not been fully implemented.

Also in our November 2024 report, we found that while OCED's activities followed some leading practices to enhance federal agency coordination, performance management, and workforce planning, DOE should take additional steps. Specifically, OCED's goals do not cover all its activities and not all OCED's long-term goals have associated near term-measurable goals. Furthermore, at the time of our report, OCED stated that it needed to fill about 100 more positions to fully staff the office to meet its organizational needs, but OCED had not developed a strategic workforce plan. We recommended that OCED take steps to fully implement leading practices for workforce planning by developing a strategic workforce plan and processes to evaluate progress toward OCED's human capital goals. OCED agreed with this recommendation, and we are monitoring its implementation. As of February 19, 2025, OCED anticipated that 62 staff would be lost through planned resignations and the dismissal of probationary employees—representing about 20 percent of the OCED workforce.

Our November 2024 report did not examine OCED's oversight of awarded projects because few awards had been made at the time of our review. However, we have made prior recommendations related to oversight of nuclear and carbon capture projects that had previously been managed by other DOE offices. While DOE has made some progress, these recommendations have not been fully implemented. Specifically:

- In September 2022, we reported that DOE planned to use external independent reviews to oversee Advanced Reactor Demonstration Program awards but had not institutionalized these plans.[34] We recommended that DOE document and institutionalize risk management processes for large nuclear energy demonstration projects. DOE has since taken some action to address it through OCED's management of these projects.

[32]DOE agreed with this recommendation. As of October 2024, DOE had directed staff to follow the guidance to ensure selected projects are technically acceptable. We are continuing to monitor to ensure staff adhere to this guidance. GAO, *Decarbonization: Opportunities Exist to Improve the Department of Energy's Management of Risks to Carbon Capture Projects*, GAO-24-106489 (Washington, D.C.: May 16, 2024).

[33]These awards include Regional Clean Hydrogen Hubs and carbon capture demonstrations that were awarded as of October 2024.

[34]GAO, *Nuclear Energy Projects: DOE Should Institutionalize Oversight Plans for Demonstrations of New Reactor Types,* GAO-22-105394 (Washington, D.C.: Sept. 8, 2022).

- In December 2021, we found that DOE supported projects even though they were not meeting required key milestones and bypassed cost controls designed to limit its financial exposure. As a result, the agency spent nearly $472 million on four unbuilt coal facilities.[35] We recommended that DOE more consistently administer projects against established scopes, schedules, and budgets. As of January 2025, OCED has made some progress, but completion of its actions remains pending.

Loan Programs Office

DOE's Loan Programs Office is to provide loans and loan guarantees for innovative and high-impact energy-related ventures. The IIJA and the IRA added two new loan programs to LPO's three active programs and provided over $350 billion in new loan authority for LPO, with much of the loan authority expiring by 2028.[36] The two new programs were the Carbon Dioxide Transportation Infrastructure Finance and Innovation Act Program and the Title XVII Energy Infrastructure Reinvestment Program. The two laws also expanded the eligibility or coverage for existing programs, for example to include medium- and heavy-duty vehicles under the Advanced Technology Vehicles Manufacturing Program. Industry interest in and applications to LPO's loan programs increased substantially starting in 2021.

The loans and guarantees LPO closed in the last quarter of calendar year 2024 account for about half of the total that the office has closed under its five current programs. Specifically, since the first loans and guarantees under these programs were made in 2009 through December 2024, LPO had closed loans or loan guarantees for a total of 24 projects with a combined obligated value of $52.5 billion (see table 1). In the last three months of 2024, LPO reported it closed 11 loans or loan guarantees with a combined value of $24.4 billion.

Table 1: Loan Programs Office Number and Value of Projects Achieving Financial Close, as of December 2024

Number of projects achieving financial close (value, billions)

	Title XVII Clean Energy Financing Program	Tribal Energy Financing Program	Advanced Technology Vehicles Manufacturing Program	Carbon Dioxide Transportation Infrastructure Finance and Innovation Act Program	Title XVII Energy Infrastructure Reinvestment Program	Total[c]
January 2009 - December 2021	1 ($11.6)[a]	0 ($0)	5 ($8.4)	N/A[b]	N/A[b]	**6 ($20.0)**
January 2022 – September 2024	2 ($3.8)	1 ($0.1)	3 ($2.9)	0 ($)	1 ($1.4)	**7 ($8.2)**
October 2024 – December 2024	3 ($1.9)	0 ($0)	6 ($20.6)	0 ($0)	2 (1.9)	**11 ($24.4)**

[35]While this report reviewed DOE's Office of Fossil Energy and Carbon Management carbon capture and storage demonstrations, according to DOE officials, OCED is now responsible for carbon capture demonstrations moving forward and DOE has indicated to us that OCED is best positioned to evaluate our recommendations and develop a corrective action plan.

[36]The total loan authority for each program, or the amount of loans and loan guarantees LPO may issue for each of the programs, is determined in one of two ways. First, Congress may authorize a maximum amount for the loans or loan guarantees that can be made. LPO may not exceed this amount unless Congress amends the legislation. Second, LPO may also be limited by congressional appropriations for credit subsidy cost. LPO estimates the amount of loan authority it can support based on the dollar amount Congress appropriates for credit subsidy cost, and if that amount is lower than any amount authorized by Congress, LPO is limited by available appropriations. LPO also continues to monitor several loans from the Title XVII Renewable Energy Loan Guarantee Program (Section 1705), for which program authority expired September 30, 2011.

	Title XVII Clean Energy Financing Program	Tribal Energy Financing Program	Advanced Technology Vehicles Manufacturing Program	Carbon Dioxide Transportation Infrastructure Finance and Innovation Act Program	Title XVII Energy Infrastructure Reinvestment Program	Total[c]
Total[c]	**6 ($17.3)**	**1 ($0.1)**	**14 ($31.2)**	**0 ($0)**	**3 ($3.3)**	**24 ($52.5)**

Source: GAO analysis of DOE documentation and data. | GAO-25-108135

[a]The Loan Programs Office has closed on a total of 10 loans on the Vogtle nuclear power plant, we report these as one project.

[b]This program did not yet exist or had not yet begun accepting applications during this period.

[c]Totals may not sum due to rounding.

After a loan or loan guarantee reaches financial close, LPO's practice is to continue to monitor it until it is fully paid. We have previously reported on the importance of monitoring loans and guarantees to proactively manage their risks and protect the financial interests of the federal government and the taxpayer.[37] In 2014, we made four recommendations to help ensure LPO was effectively monitoring its loans, all of which were implemented, including that the office staff key positions in its loan monitoring area. However, given the substantial increase in loan activity in the last 3 months of 2024, it is uncertain whether LPO can still ensure it has the capacity and expertise to effectively monitor these loans and guarantees for years to come. We will be examining this in future work.

Key Issues Looking Ahead

As we have previously reported, there are risks involved with major new programs, especially when funding is awarded on a compressed schedule.[38] At this point, EPA and DOE have stood up programs and issued awards, and now their emphasis turns to monitoring and overseeing those awards.

We have also previously reported on challenges to monitoring and oversight, including managing fraud risk, adhering to cost controls, and ensuring programs have the right policies and expertise in place. Monitoring existing awards may require different skills and expertise than evaluating award applications. In this regard, the staff reductions at OCED and potentially other offices have the potential to adversely affect the ability to monitor existing projects, and could increase the associated fraud and financial risks. Staff reductions may also affect the quality of loan and grant awards.

Currently, we are performing ongoing work regarding EPA spending of IRA appropriations. We are assessing EPA's process for making spending decisions in light of relevant agency polices, such as EPA's Competition Policy, and other federal requirements, such as OMB's *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (as codified at 2 C.F.R. Part 200).

We are also examining how EPA is overseeing its use of IRA appropriations to ensure they meet IRA and grant requirements. Specifically, we are assessing EPA's monitoring and oversight of grant recipients and the extent to which the oversight extends to program beneficiaries. Our audit work will also examine how agency

[37]GAO, *DOE Loan Programs: DOE Should Fully Develop Its Loan Monitoring Function and Evaluate Its Effectiveness,* GAO-14-367 (Washington, D.C.: May 1, 2014).

[38]For example, see GAO-23-106726 and GAO-22-105111.

officials are implementing EPA's processes for program management, performance measurement, and recipient performance monitoring.

GAO is performing other ongoing work examining how EPA and DOE are spending and overseeing the funds they received through the IIJA and IRA, including reviews of the following:

- Potential fragmentation, overlap, and duplication among EPA and other federal programs that fund non-diesel school buses;[39]
- Funding for water and wastewater infrastructure improvements for disaster resilience, including from EPA;
- DOE's Loan Programs Office;
- DOE's Office of Clean Energy Demonstrations oversight of awarded projects; and
- EPA's, DOE's, and other agencies' oversight of selected programs, including EPA's Greenhouse Gas Reduction Fund and DOE's Hydrogen Hubs program, to help prevent fraud, waste and abuse.

Chairman Palmer, Ranking Member Clarke, and Members of the Subcommittee, this completes our prepared statement. We would be pleased to respond to any questions you may have at this time.

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[39]For example, the IIJA appropriated a total of $5 billion from fiscal year 2022 through fiscal year 2026 to EPA for the Clean School Bus program. 42 U.S.C. § 16091. The IRA appropriated $1 billion from fiscal year 2022 through fiscal year 2031 for EPA to establish the Clean Heavy-Duty Vehicles program, which offers grants to subsidize the purchase of zero-emission heavy-duty vehicles, including certain school buses. 42 U.S.C. § 7432. The IIJA also appropriated $500 million from FY2022 through FY2026 for DOE to administer grants for energy improvements at public school facilities, including the purchase of alternative fueled buses and other vehicles. 42 U.S.C. § 18831.

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