

NAVIGATING THE GREEN PATH: THE GREENHOUSE GAS REDUCTION FUND AND THE HURDLES TO DEPLOYING FEDERAL FUNDS

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ABSTRACT

The Greenhouse Gas Reduction Fund (GGRF) represents America's largest step forward to developing a clean energy economy. However, to obtain federal funding, awardees must comply with a multitude of requirements. To awardees, contractors, and developers, these requirements are a quagmire of conditions precedent to federal funding that increase the time and cost of infrastructure projects. To others, the requirements are vehicles for policy goals that can achieve considerable progress toward equity and inclusion. Whether funds are obligated and deployed into projects depends not only on the feasibility of compliance with these requirements, but also the ability of states, developers, contractors, and financiers to navigate and prove their compliance with the GGRF requirements.

This article delves into specifics of the GGRF program, requirements for federal funding under the GGRF, and potential issues that may arise with the implementation of this program and its requirements. Although the GGRF's requirements reflect valuable policy goals, this article suggests that these requirements must be flexible enough to account for the practical realities of compliance. However, in their current state, these requirements may make it more difficult and costly to deploy funds into projects.

INTRODUCTION

To address the existential threat posed by climate change, the U.S. economy must drastically reduce emissions and electrify.¹ The transportation sector, industrial sector, and, most crucially, the electric power sector are all prime targets for decarbonization and electrification, each making up about a quarter of total U.S. greenhouse gas (“GHG”) emissions in 2022.²

But funding this transition requires money—a lot of money, especially for the electric power industry. We need to design, deploy, and operate new

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1. Courtney Lindwall, *Decarbonization: Why We Must Electrify Everything Even Before the Grid is Fully Green*, NRDC (Dec. 1, 2022), <https://www.nrdc.org/stories/why-we-must-electrify-everything-even-grid-fully-green>; DANIEL STEINBERG ET AL., *ELECTRIFICATION & DECARBONIZATION: EXPLORING U.S. ENERGY USE & GREENHOUSE GAS EMISSIONS IN SCENARIOS WITH WIDESPREAD ELECTRIFICATION & POWER SECTOR DECARBONIZATION* (2017).

2. *Greenhouse Gas Emissions: Sources of Greenhouse Gas Emissions*, EPA, <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions> (last updated Oct. 22, 2024) (explaining that the transportation, electric power, and industrial sectors make up about 28%, 25%, and 23% of the total U.S. GHG emissions, respectively).

equipment and supply chains across the energy sector, from residential- to utility-scale. To achieve net-zero emissions by 2050, the U.S. must invest \$360 billion through 2030 and \$2.4 trillion by 2050 into new transmission lines alone.³ Funding the clean energy transition is no easy task, especially in today's hyperpolarized political reality.

The passage of the Inflation Reduction Act (IRA) in 2022 offers a path forward to funding a transition to a greener economy. Receiving no bipartisan support,⁴ this law invested in domestic energy production, domestic energy manufacturing, and aims to reduce carbon emissions by roughly 40% by 2030.⁵ Put simply, the IRA is the largest investment in reducing carbon pollution in U.S. history.⁶

The IRA also champions clean energy and environmental justice. The IRA extends and expands two tax credits that allow taxpayers to deduct a percentage of the cost of renewable energy systems from their federal taxes: the Investment Tax Credit (ITC)⁷ and the Production Tax Credit (PTC).⁸ Section 48(e) of the IRA offers new access to clean energy tax credits that emphasizes reaching disadvantaged populations and communities with environmental justice concerns. Certain ITC projects may be eligible for bonus credits up to 20% if the projects are built in low-income communities, on Indian land, is a qualified low-income residential building project, or is a

3. ERIC LARSON ET AL., NET-ZERO AMERICA: POTENTIAL PATHWAYS, INFRASTRUCTURE, & IMPACTS, PRINCETON UNIV. (2020); Jacob Knutson, *Why the High Price of Modernizing the U.S. Power Grid Is Worth It*, AXIOS (July 11, 2023), <https://www.axios.com/2023/07/11/us-power-grid-modernize-climate-change>.

4. Melissa Quinn, *Senate Passes Democrats' Sweeping Climate, Health and Tax Bill, Delivering Win for Biden*, CBS NEWS (Aug. 8, 2022, 7:16 PM), <https://www.cbsnews.com/news/inflation-reduction-act-senate-pass-climate-healthcare-tax-bill/> ("The plan, called the Inflation Reduction Act, cleared the upper chamber by a vote of 51 to 50 along party lines, with Vice President Kamala Harris providing the tie-breaking vote in the evenly divided Senate.")

5. *Summary: The Inflation Reduction Act of 2022*, U.S. CONG., https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_one_page_summary.pdf (last visited Nov. 1, 2024).

6. Eric Van Nostrand & Arik Levinson, *The Inflation Reduction Act: Pro-Growth Climate Policy*, U.S. DEP'T OF THE TREASURY (Nov. 13, 2023), <https://home.treasury.gov/news/featured-stories/the-inflation-reduction-act-pro-growth-climate-policy>.

7. *Federal Solar Tax Credits for Businesses February 2024*, U.S. DEP'T OF ENERGY & OFF. OF ENERGY EFFICIENCY & RENEWABLE ENERGY (last updated Dec. 2024), <https://www.energy.gov/eere/solar/federal-solar-tax-credits-businesses> ("The [ITC] is a tax credit that reduces the federal income tax liability for a percentage of the cost of a solar system that is installed during the tax year.") [hereinafter *Federal Solar Tax Credits*].

8. *Summary of Inflation Reduction Act Provision Related to Renewable Energy*, EPA, <https://www.epa.gov/green-power-markets/summary-inflation-reduction-act-provisions-related-renewable-energy>; (last visited Nov. 1, 2024); *Federal Solar Tax Credits*, *supra* note 7, at 2 ("The [PTC] is a per kilowatt-hour (kWh) tax credit for electricity generated by solar and other qualifying technologies for the first 10 years of a system's operations It reduces the federal income tax liability and is adjusted annually for inflation.") [hereinafter *Summary of IRA Provision*].

qualified low-income economic benefit project.⁹ In sum, the IRA provides incentives to states and industries that go further in offering actual community benefits.¹⁰

The focus of this article, however, is one program created under the IRA: the Greenhouse Gas Reduction Fund (GGRF). This \$27 billion fund,¹¹ administered through the Environmental Protection Agency (EPA), focuses on deploying clean energy projects using the green bank model,¹² which the

9. *Summary of IRA Provision, supra* note 8.

10. *The Bipartisan Infrastructure Law Advances Environmental Justice*, THE WHITE HOUSE (Nov. 16, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/16/the-bipartisan-infrastructure-law-advances-environmental-justice/> (explaining that the BIL aims at ensuring clean drinking water, targets legacy pollution, and clean public transit); Hannah Perls, *Breaking Down the Environmental Justice Provisions in the 2022 Inflation Reduction Act*, HARV. L. SCH. ENV'T & ENERGY L. PROGRAM (Aug. 12, 2022), <https://eelp.law.harvard.edu/2022/08/ira-ej-provisions/> (detailing that the IRA will direct “billions of dollars to communities based on various EJ-related criteria, including income, energy burden, and demographics”); Evana Said et al., *U.S. Clean Energy Projects Need Public Buy-in. Community Benefits Agreements Can Help*, WORLD RES. INST. (Aug. 31, 2023), <https://www.wri.org/insights/community-benefits-agreements-us-clean-energy#>. The authors detail DOE’s EJ scoring requirements:

The [DOE] now requires developers to submit community benefits plans as part of all BIL and IRA funding opportunities and loan applications. These are evaluated based on four pillars — implementing Justice40; investing in America’s workforce; engaging communities and labor; and advancing diversity, equity, inclusion, and accessibility — and will count for 20% of a project’s overall score during the review process. *Id.*

11. Aditi Srivastava, *The Greenhouse Gas Reduction Fund, Green Banks, & Nature-Based Solutions: An Interview with Matt Carney, Quantified Ventures*, THE CONSERVATION FIN. NETWORK (May 23, 2024), <https://www.conservaionfinancenetwork.org/2024/05/23/the-greenhouse-gas-reduction-fund-green-banks-nature-based-solutions-an-interview-with/> (“Programs under the [GGRF], such as NCIF and CCIA, offer loans rather than grants. While this capital is cost-effective, it requires repayment, a shift from the traditional grant funding . . .”); *Grants vs. Loans: What’s the Difference?*, ROCKET LAWYER, <https://www.rocketlawyer.com/business-and-contracts/business-operations/corporate-finance/legal-guide/grants-vs-loans-whats-the-difference> (last visited July 31, 2024) (“Grants are also limited in the amount of financing they can provide. In most cases, grant programs are sponsored by government departments and only a certain amount of funding is available each year. With a loan, you can obtain as much funding as your credit and ability to repay will allow.”); *Financing v Funding: There Is a Difference*, VT. BOND BANK, <https://www.vtbondbank.org/resource/financing-v-funding-there-difference> (last visited July 31, 2024) (“Grant sources are time consuming to access and highly competitive and can obscure the true cost of infrastructure investment.”). In other words, financing programs like the GGRF create a sustainable funding source for future projects instead of having a finite funding source from a grant program.

12. *Three Ways the Inflation Reduction Act Advances Green Banking*, BURR & FORMAN (Aug. 19, 2022), <https://www.burr.com/newsroom/articles/three-ways-the-inflation-reduction-act-advances-green-banking> (“Green banks have momentum and are a proven financial model that uses public . . . funds to mobilize private investment in renewable energy, energy efficiency, and other decarbonization technologies. With the [IRA] now law, more states will form green banks and . . . [can] capitalize on the federal funding and further green projects.”); Ilmi Granoff, *The End of the Beginning for U.S. Green Banks*, ROOSEVELT INST. (Apr. 5, 2024), <https://rooseveltinstitute.org/2024/04/05/the-end-of-the-beginning-for-us-green-banks/> (explaining that public capital can have a “powerful role in steering private capital toward the communities and technologies that need it most. It can take calculated and compensated bets in technologies and markets in which the private sector is slow to act, or by demonstrating the commercial viability of new technologies or business models.”).

Connecticut Green Bank, a quasi-governmental state agency, pioneered in 2011.¹³ The GGRF selected awardees who can leverage this public funding to attract private capital¹⁴ for clean energy and clean air investments.¹⁵ EPA Administrator Michael S. Regan stated, “[T]his program will mobilize billions more in private capital to reduce pollution and improve public health, all while lowering energy costs, increasing energy security, creating good-paying jobs, and boosting economic prosperity in communities across the country.”¹⁶

I. THE GREENHOUSE GAS REDUCTION FUND (GGRF): PROGRAM BASICS

Section 60103 of the IRA¹⁷ created the GGRF and appropriated \$27 billion to the program. The GGRF aims to: “(1) reduce emissions of GHGs and other air pollution; (2) deliver benefits of GHG- and air pollution-reducing projects to American communities, particularly low-income and disadvantaged communities;”¹⁸ and (3) mobilize financing and private

13. *About the Greenhouse Gas Reduction Fund*, EPA, <https://www.epa.gov/greenhouse-gas-reduction-fund/about-greenhouse-gas-reduction-fund> (last updated Aug. 16, 2024); 2011 Conn. Pub. Acts 11-80.

14. This is typically quantified as a balance sheet leverage ratio, which measures the “financial leverage on the balance sheet of a company, or the reliance a company has on creditors to fund its operations.” A high leverage ratio indicates significant reliance on external debt financing sources, while a low leverage ratio indicates that operations are funded mostly with internally generated cash. *Leveraging a Green Bank’s Balance Sheet to Develop More Socioeconomic Projects*, COHNREZNIK (May 6, 2024), <https://www.cohnreznick.com/insights/green-banks-balance-sheet-expansion-tools-overview> (“Green banks can leverage their balance sheets primarily by mobilizing capital from various sources, including the U.S. government, [NGOs], capital markets, and other financial institutions . . . By leveraging their capital, green banks can significantly increase the overall monies flowing to projects and amplify the impact of their investments.”); *Leverage Ratio*, WALL STREET PREP, <https://www.wallstreetprep.com/knowledge/leverage-ratio/> (last updated July 10, 2024); *Connecticut Green Bank FY22 Annual Report*, CONN. GREEN BANK (2022), <https://www.ctgreenbank.com/wp-content/uploads/2023/01/Connecticut-Green-Bank-FY22-Annual-Report-Final-12-27-2022.pdf> (“[The Connecticut Green Bank has] mobilized nearly \$2.3 billion by investing public funds to attract private investment at seven-to-one ratio.”); Ilmi Granoff, *The End of the Beginning for U.S. Green Banks*, ROOSEVELT INST. (Apr. 5, 2024), <https://rooseveltinstitute.org/2024/04/05/the-end-of-the-beginning-for-us-green-banks/> (“Green banks will unlock clean energy financing everywhere.”).

15. See *EPA Announces Initial Program Design of Greenhouse Gas Reduction Fund*, EPA 4 (Feb. 14, 2023), <https://www.epa.gov/newsreleases/epa-announces-initial-program-design-greenhouse-gas-reduction-fund> (“Over the next decade, [green banks] will help us build on current efforts by mobilizing financing and private capital for a range of clean energy projects to decarbonize communities—including low-income and disadvantaged communities—across the United States.”).

16. *Id.* at 2.

17. Clean Air Act, 42 U.S.C. § 7434.

18. *Low Income and Disadvantaged Communities (LIDAC) Climate Action Plan Assessment – ARPA Question + Answer Session*, CITY OF EL PASO, TEX. (June 20, 2024), <https://www.elpasotexas.gov/assets/Documents/CoEP/Community-Development/Climate-Action/LIDAC-NOFA-Q+A-Draft.pdf> (EPA defines low-income and disadvantaged communities as “communities with residents that have low incomes, limited access to resources, and disproportionate exposure to environmental or climate burdens”).

capital to stimulate additional deployment of GHG- and air pollution-reducing projects.¹⁹ EPA intends to distribute GGRF funds through three competitions: the approximately \$14 billion National Clean Investment Fund (NCIF) competition, the \$6 billion Clean Communities Investment Accelerator (CCIA) competition, and the \$7 billion Solar for All competition.²⁰ The enabling statute provides two sets of requirements by creating the following categories: \$19.97 billion for General and Low-Income Assistance and \$7 billion for Zero-Emissions Technologies.²¹

A. General Assistance and Low-Income and Disadvantaged Communities

Under this category, EPA receives a total of \$19.97 billion in appropriations to develop competitive grants for eligible recipients.²² EPA shall use \$11.97 billion to provide general financial and technical assistance.²³ With the remaining \$8 billion, EPA shall provide the same assistance specifically to low-income and disadvantaged communities.²⁴

The statute lays out two pathways for the use of funds. First, eligible recipients may make “direct investment[s].”²⁵ Eligible recipients must also prioritize investment in qualified projects²⁶ that would otherwise lack access to financing.²⁷ Second, eligible recipients may make “indirect

19. *About the Greenhouse Gas Reduction Fund*, *supra* note 13, at 2.

20. *Id.*

21. *EPA’s Implementation Framework for the Greenhouse Reduction Act*, EPA 5 (2023), https://www.epa.gov/system/files/documents/2023-04/GGRF%20Implementation%20Framework_730am.pdf [hereinafter *EPA’s Implementation Framework*].

22. Congress limited the definition of “eligible recipients” to mean a nonprofit organization that: (A) is designed to provide capital, leverage private capital, and provide other forms of financial assistance for the rapid deployment of low- and zero-emission products, technologies, and services; (B) does not take deposits other than deposits from repayments and other revenue received from financial assistance using the grant funds; (C) is funded by public or charitable contributions; and (D) invests in or finances projects alone or in conjunction with other investors. *Id.* at 5–6.

23. 42 U.S.C. § 7434(a)(2).

24. *EPA’s Implementation Framework*, *supra* note 21, at 5; 42 U.S.C. § 7434(a)(3).

25. *See EPA’s Implementation Framework*, *supra* note 21, at 5 (explaining that direct investments are those that use grant funds as financial assistance for qualified projects at the national, regional, state, and local levels. Simply put, a direct investment occurs when a GGRF awardee uses grant money to invest directly into a qualified project. For example, a direct investment would be a green bank’s investment into energy efficiency upgrades in a LIDAC.) *See also* 42 U.S.C. § 7434(b)(1).

26. 42 U.S.C. § 7434(e)(3) (detailing that a qualified project is “any project, activity, or technology that (A) reduces or avoids greenhouse gas emissions or other forms of air pollution in partnership with, and by leveraging investment from, the private sector; or (B) assists communities [] to reduce or avoid greenhouse gas emissions and other forms of air pollution.”)

27. *Id.*; 42 U.S.C. § 7434(b)(1)(B).

investment[s]”²⁸ to provide funding and technical assistance to establish “new, or support[] existing, public, quasi-public, not-for-profit, or nonprofit entities that provide financial assistance to qualified projects.”²⁹ This would occur at the state, local, territorial, or Tribal level or in the District of Columbia, “including community- and low-income-focused lenders and capital providers.”³⁰ EPA had two competitions under this category of funding; one for direct investments (i.e., NCIF) and one for indirect investments (i.e., CCIA).³¹

B. Zero-Emissions Technologies

Under this category, EPA receives \$7 billion to “make competitive grants to states, municipalities, Tribal governments, and eligible recipients to provide subgrants, loans, or other forms of financial assistance and technical assistance to enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies [], and to carry out other GHG emissions reduction activities.”³² EPA established a third competition (nicknamed Solar for All) through a strong legislative effort from U.S. Senator Bernie Sanders to implement this category of funding, which focuses on distributed solar technologies.³³ This program prioritizes residential and community solar projects, as well as storage technologies and upgrades related to these projects.³⁴

II. FEDERAL MONEY, FEDERAL REQUIREMENTS

Like any federal program, recipients must meet a myriad of requirements to use GGRF funding. But deployment becomes complicated as the goal of the GGRF is to provide financing, not grants and subsidies. Stated another way, when the federal government partially funds a school or other

28. See *EPA’s Implementation Framework*, *supra* note 21, at 5 (describing indirect investments as those that use grant funds to prop up financing institutions, such as green banks or community development financial institutions (“CDFIs”) that then provide financial assistance to qualified projects. In other words, an indirect investment occurs when a GGRF awardee uses grant funds to invest in an institution that can invest in qualified projects. For instance, an indirect investment would be a state government’s investment into the establishment of a green bank that provides financial assistance within that state.); See also 42 U.S.C. § 7434(b)(2).

29. 42 U.S.C. § 7434(b)(2).

30. 42 U.S.C. § 7434(b)(2).

31. *EPA’s Implementation Framework*, *supra* note 21, at 6.

32. *Id.*

33. Kenny Stancil, *EPA, Sanders Launch \$7 Billion Program to Expand Rooftop Solar in Poor Neighborhoods*, COMMON DREAMS (June 28, 2023), <https://www.commondreams.org/news/biden-epa-sanders-7-billion-residential-solar-for-all>.

34. *EPA’s Implementation Framework*, *supra* note 21, at 41.

government project, developers and states understand the strings attached with federal grant awards.³⁵ However, when financing and leveraging private capital is a key policy goal, the baseline program requirements can be a barrier for deployment, as it adds additional requirements on top of existing underwriting and stakeholder engagement processes.

Compliance with federal requirements is a prerequisite to the possibility of funding projects, which is why it is imperative for awardees to understand the requirements and the associated hurdles to compliance. One of the key priorities of the GGRF is using public funding to attract private capital to the green economy. To achieve this priority, both public GGRF award recipients and their private capital partners must be aware of and assume the risk of compliance with the federal requirements. This section details key GGRF requirements, and whether compliance may pose a barrier to the deploying GGRF funds.

A. Build America, Buy America

Congress enacted the Build America Buy America Act (BABA) as part of the Bipartisan Investment Law (BIL) in 2021.³⁶ BABA established a “domestic content procurement preference for all Federal financial assistance obligated for infrastructure projects.”³⁷ Put simply, BABA requires that all iron, steel,³⁸ manufactured products, and construction materials³⁹ used in covered infrastructure projects⁴⁰ are produced in the United States.⁴¹ BABA

35 Cf. *Grants 101: Pre-Award Phase*, grants.gov (last visited Dec. 7, 2024), <https://www.grants.gov/learn-grants/grants-101/pre-award-phase#applicationreviewprocess>, (“[The grant applicant] should spend time analyzing [their] own capabilities as compared to the specific eligibility and technical requirements detailed in the application instructions.”); *Researching Subsidy Programs and Laws*, good jobs first (last visited Dec. 7, 2024), <https://goodjobsfirst.org/researching-subsidy-programs-and-laws/> (explaining that the legislative and administrative processes create subsidy programs and that agencies add administrative rules or operating procedures to these laws to set out how the law will be implemented and what requirements will apply).

36. Off. of Acquisition Mgmt., *Build America Buy America*, U.S. DEP’T OF COM., <https://www.commerce.gov/oam/build-america-buy-america> (last visited July 22, 2024).

37. *Id.*; 2 C.F.R. § 184.3 (2023).

38. All manufacturing processes, from the initial melting stage through the application of coatings, must take place in the U.S. Federal Emergency Management Agency. *Build America, Buy America Act Frequently Asked Questions*, FED. EMERGENCY MGMT. AGENCY, <https://www.fema.gov/fact-sheet/build-america-buy-america-act-frequently-asked-questions-faqs> (last updated Oct. 2, 2024) [hereinafter *BABA FAQs*].

39. *Id.* (“[M]anufactured product[s] [must be] manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States [must be] greater than 55% of the total cost of all components of the manufactured product.”).

40. *DOE’s Implementation of the Buy America Requirement for Infrastructure Projects*, DEP’T OF ENERGY (Nov. 2022), <https://www.energy.gov/sites/default/files/2023-06/DOE%27s%20Implementation%20of%20the%20Buy%20America%20Preference%2011-17.pdf>.

41. *BABA FAQs*, *supra* note 38.

is a key component of U.S. policy to rebuild a domestic manufacturing base—it ensures that as new technology is deployed across the American economy, the benefits of this transition are felt across the supply chain.⁴² By implementing BABA, the U.S. can also increase national security by reducing exposure to supply chain risks, such as the shortages and delays experienced by many Americans during the COVID pandemic.⁴³

BABA applies to “Federal awards where funds are appropriated or otherwise made available for infrastructure projects in the United States, regardless of whether infrastructure is the primary purpose of the Federal award.”⁴⁴ Not all GGRF-funded projects, however, will be considered public infrastructure projects.⁴⁵ Applicable public⁴⁶ infrastructure projects can include everything from transportation infrastructure to drinking and wastewater systems to energy infrastructure.⁴⁷ BABA applies to “articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project.”⁴⁸ It does not apply to tools, equipment, supplies, or other items that are not an “integral part” of the infrastructure, or which are not permanently affixed to the structure.⁴⁹ It also does not apply to residential projects.⁵⁰ GGRF fund recipients may obtain a certification from

42. *Key Provisions in the Build America, Buy America Act Guidance*, the white house (last visited Dec. 7, 2024), https://www.whitehouse.gov/wp-content/uploads/2023/08/QA-BABA-Guidance.Final_.pdf, (“Through industry engagement, complementary initiatives to boost our industrial base, and the use of transparent, targeted waivers, we are working to ensure that [BABA] requirements are integrated with industrial strategies to increase opportunities for domestic producers and fill gaps in our supply chain.”).

43. *BABA Expansion and New Optional Tools*, Dep’t of Hous. and Urban Dev. (Aug. 23, 2024), <https://www.hudexchange.info/news/new-build-america-buy-america-resources-available/> (“BABA aims to bolster America’s domestic manufacturing and supply chain, protect national security, support high-paying jobs, increase community investment, create economic prosperity, and spur innovation.”).

44. 2 C.F.R. § 184.4(a) (2023).

45. 2 C.F.R. § 184.3 (“Infrastructure project means any activity related to the construction, alteration, maintenance, or repair of infrastructure in the United States regardless of whether infrastructure is the primary purpose of the project.”).

46. BABA does not apply to “non-public” infrastructure. *DOE’s Implementation of the Buy America Requirement for Infrastructure Projects*, *supra* note 40. Federal agencies should interpret “infrastructure” broadly. 2 C.F.R. § 184.4(d). When determining if a particular project constitutes “infrastructure,” agencies should consider whether the project serves a public function, whether the project is publicly owned and operated, whether it is privately operated on behalf of the public or is a place of public accommodation. *Id.*

47. For a longer list of what is included in the definition of “infrastructure,” *see* 2 C.F.R. § 184.4(c), (d).

48. *Build America, Buy America Act Frequently Asked Questions*, *supra* note 38.

49. *Id.*

50. *Id.* (“Projects consisting solely of the purchase, construction, or improvement of a private home for personal use (i.e., not serving a public function) do not constitute an infrastructure project.”)

an applicable item manufacturer that the item meets the requirements.⁵¹ Further, BABA has no sunset date; it is a permanent new requirement.⁵²

Federal agencies can waive the Buy America Preference⁵³ in any of the following circumstances: nonavailability,⁵⁴ unreasonable cost,⁵⁵ and public interest.⁵⁶ A federal awarding agency can develop and implement “general applicability” waivers, which can apply generally across multiple federal awards.⁵⁷ BABA “does not apply to expenditures for assistance . . . relating to a major disaster or emergency declared by the President . . . or pre and post disaster or emergency response expenditures.”⁵⁸

B. Implementation Issues: BABA

With minimal federal guidance, coalition groups must fend for themselves on how the waiver process works, the extent of the review period by the EPA before a waiver is granted, and other BABA mechanics. There is little formal guidance available on BABA, which contributes to the uncertainty.⁵⁹ Consequently, program participants have little clue on how to operationalize BABA for domestic steel production which is not yet in a position to transition to the clean energy economy through the GGRF.

51. See *BABA FAQs*, *supra* note 38 (explaining “[a]s an additional step to ensure compliance[,] . . . FEMA award recipients or subrecipients may request a certification letter from the product manufacturer to demonstrate compliance with BABA requirements.”).

52. *Id.*

53. 2 C.F.R. § 184.3 (defining the Buy America Preference as a domestic content procurement preference that “requires the head of each Federal agency to ensure that none of the funds made available for a federal award for an infrastructure project may be obligated unless all of the iron, steel, manufactured products, and construction materials incorporated into the project are produced in the United States.”).

54. *Id.* at § 184.7(a)(2) (“Types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality . . .”).

55. *Id.* at § 184.7(a)(3) (“The inclusion of iron, steel, manufactures products, or construction materials produced in the United States will increase the cost of the overall infrastructure project by more than 25 percent . . .”).

56. *Id.* at § 184.7(a)(1) (“Applying the Buy America Preference would be inconsistent with the public interest . . .”).

57. *Id.* at § 184.7(e).

58. *Id.* at § 184.8(a).

59. Cf. Julie Strupp, *Readers Respond: IJIA is boosting business for many contractors*, *CONSTRUCTION DIVE* (Aug. 11, 2023), <https://www.constructiondive.com/news/readers-respond-ijia-infrastructure-law-help-construction/690584/> (“Another challenge relates to the specific requirements that IJIA work entails. . . ‘Delays by our government regarding definition of what constitutes Made in USA products [poses a challenge].’”); Charlotte Erlich, *Industry leaders address shortfalls of Build America, Buy America provisions*, *UNITED PRESS INT’L* (Feb. 15, 2024), https://www.upi.com/Top_News/US/2024/02/15/build-america-buy-america-hearing/7551708033325/ (“‘We ask suppliers for compliance and receive asterisks on their quotes saying they cannot certify compliance,’ Edmondson said. ‘Put simply, there is uncertainty, and in construction, that means increased costs because contractors must account for that in their bids to mitigate risk.’”).

Now, contractors must prepare for the influx of infrastructure dollars and attempt to “manage ongoing projects that are now suddenly subject to new, onerous domestic preference requirements that have yet to be fully understood by agencies.”⁶⁰ Additionally, there must be structures in place to facilitate implementing and verifying BABA compliance.⁶¹ However, the practical realities of BABA forced many agencies to issue a range of waivers to reflect those realities.⁶² Compliance structures are either not yet in place to implement these requirements or are in a fledgling state.⁶³ Currently, not enough content is domestically produced to keep pace with the deployment of funds into projects.⁶⁴ This push to boost domestic production clashes with the “reality that some materials are not available from U.S. sources in the amount or time required.”⁶⁵ For instance, “many iron, steel, manufactured products, and construction materials are ‘not produced in the United States’ such that they are available for use in all covered infrastructure projects.”⁶⁶ Finally, in some cases, “the goal of increasing domestic content in these projects is outweighed by the administrative burden of implementation and enforcement.”⁶⁷

Following BABA’s passage, many GGRF awardees, subawardees, and contractors were left “without agency guidance as to what, exactly, would be required.”⁶⁸ The timing of guidance is a crucial element as well. Without guidance on complying with BABA (or any other GGRF requirements)

60. Cara Wulf, *Les Misérables – Contractors and Agencies Struggle to Navigate Build America, Buy America Requirements One Year Later*, GOV’T. CONTRACTOR (2022), at 2.

61. Erlich, *supra* note 59(b); Chad Brinkle, *The Build America Buy America Act: Enhancing Domestic Manufacturing and Supply Chain*, THOMAS PUBL’G CO. (July 28, 2023), <https://www.thomasnet.com/insights/build-america-buy-america-act/> (“At the time of writing this article, there is no logo or badge you can show on your website or other official documents to indicate that you are BABA-compliant.”).

62. *Id.* at 4.

63. *Id.*

64. *See, e.g.*, Todd Overman, *Buy America Update: BAA Requirements Make Compliance Complex, Yet Necessary*, BASS, BERRY & SIMS (Aug. 28, 2023), <https://www.bassberrygovcontrade.com/buy-america-update/> (explaining the GAO found that only one domestic firm could produce BAA-compliant valves); David J. Lynch, *Biden’s ‘Buy America’ Bid Runs Into Manufacturing Woes it Aims to Fix*, WASHINGTON POST (Feb. 18, 2023), <https://www.washingtonpost.com/us-policy/2023/02/18/biden-buy-america-roads-bridges/> (“The ‘Buy America’ initiative that President Biden says will promote domestic manufacturing and fuel a blue-collar renaissance is running into a problem: The United States no longer produces many of the items needed to modernize roads, bridges and ports.”).

65. David J. Lynch, *Biden’s ‘Buy America’ Bid Runs into Manufacturing Woes it Aims to Fix*, WASH. POST (Feb. 18, 2023), <https://www.washingtonpost.com/us-policy/2023/02/18/biden-buy-america-roads-bridges/>.

66. Wulf, *supra* note 60, at 4.

67. *Id.*

68. *Id.*

before deploying funds, awardees and subawardees risk the EPA determining that the investments were non-compliant and incurring associated penalties.

Further, agencies themselves are struggling to figure out how to comply. The Department of Education found 32 of its own programs that would be classified as “infrastructure” under BABA.⁶⁹ The Federal Emergency Management Agency (FEMA) found 23 programs.⁷⁰ Finally, in April 2022, the Office of Management and Budget (OMB) issued guidance to federal agencies. However, because of its extraordinary complexity and the conflicts it creates with other domestic-preference laws,⁷¹ the new OMB guidance⁷² may impose “heavy compliance burdens on contractors and suppliers, disrupt existing supply chains, and trigger disputes (through bid protests or otherwise) over states’ prior commitments to open their procurement markets under international trade agreements.”⁷³ Additionally, OMB’s guidance could only take the horse to water, not make it drink. OMB’s guidance still requires agencies to “determine how this guidance is best applied to their infrastructure programs and processes, and consult with OMB, as needed, on establishing criteria, processes, and procedures for applying a Buy America preference and issuing waivers.”⁷⁴ In short, these expanding mandates to use American-made products “has confused federal, state and local governments, and created new levels of bureaucratic waste.”⁷⁵

69. Judge Glock, *Buy American, Build Nothing*, WALL ST. J. (Mar. 25, 2024), <https://www.wsj.com/articles/buy-american-build-nothing-infrastructure-bill-requirements-complicate-construction-941e0694>.

70. *Id.*

71. Christopher Yukins & Kristen Ittig, *OMB Issues Final Build America, Buy America (BABA) Guidance Which May Trigger Compliance, Enforcement and Trade Issues — And Bid Protests*, MONDAQ (Sept. 18, 2023), <https://www.mondaq.com/unitedstates/government-contracts-procurement-ppp/1366952/omb-issues-final-build-america-buy-america-baba-guidance-which-may-trigger-compliance-enforcement-and-trade-issues--and-bid-protests>. The authors discuss the following conflict:

One example of this conflict between new and old laws arose in the infrastructure legislation’s definition of “construction materials.” In traditional federal procurement, the implementing clauses for the Buy American Act defined “construction materials” as “an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work,” or “an item brought to the site preassembled from articles, materials, or supplies.” This could be called the “truck bed” rule—“construction materials” under the older Buy American Act would be those items brought to a construction site on a truck bed. As the discussion below explains, however, OMB’s final BABA guidance defined “construction materials” much more narrowly—though with more stringent requirements, which raises compliance challenges for contractors and suppliers that serve diverse federal, state and local markets. *Id.* (citations omitted).

72. OMB Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure* (2022).

73. Yukins, *supra* note 71.

74. Wulf, *supra* note 60, at 5.

75. Glock, *supra* note 69, at 1.

Besides issues understanding BABA requirements, there is another issue: China—“the biggest influencer on global steel” production.⁷⁶ China has “approximately 10 times” the steelmaking capacity of the United States.⁷⁷ Much of this capacity derives from China’s “advantages of industrial chain clusters, logistics supply chain advantages, industrial workers advantages . . . [and factories with] the dual advantages of high production efficiency and low production costs.”⁷⁸ China also has a foothold in specialty manufacturing processes that are crucial for BABA compliance. In more niche industries, like steel powder coating, the market power is held outside the United States.⁷⁹ In fact, only 20% of the global powder coating market is in the Americas.⁸⁰ Steel powder coating is only one infinitesimal part of the entire process, but because BABA requires “all manufacturing processes, from the initial melting stage through the application of coatings”⁸¹ to take place in the U.S., everything starts to add up. Further, this becomes a larger issue when more integral parts of the steel and iron manufacturing process, like casting, are consolidated under Asian market power.⁸² Thus, with critical manufacturing processes consolidated outside the U.S., GGRF program participants must have BABA waivers ready until domestic steel production ramps up.

BABA is based on solid policy goals. However, it may be more cumbersome than anticipated and require more direct government support to boost U.S. steel production. From the basics of compliance to global manufacturing market power, there are countless features that make BABA implementation and compliance more difficult. Despite this, BABA carves out exemptions covering instances where, for example, a product may not be

76. Shobhit Seth, *How China Impacts the Global Steel Industry*, INVESTOPEDIA, <https://www.investopedia.com/articles/investing/021716/how-china-impacts-global-steel-industry.asp> (last updated Dec. 29, 2024).

77. *Id.*

78. Felicia Ying, *The Scale of China’s Manufacturing Industry Has Been the World’s No. 1 for 13 Consecutive Years*, LINKEDIN (Apr. 7, 2023), <https://www.linkedin.com/pulse/scale-chinas-manufacturing-industry-has-been-worlds-1-%E6%81%92-%E6%9D%8E>.

79. Ashish Ladha & Aditya Birla, *Emerging Trends in the Powder Coatings Market*, PAINT & COATINGS INDUS. (Aug. 7, 2023), <https://www.pcimags.com/articles/111658-emerging-trends-in-the-powder-coatings-market>.

80. *Id.*

81. 2 C.F.R. § 184.3 (2024).

82. Kiran Pulidindi & Akshay Prakash, *Iron & Steel Casting Market – By Material (Iron, Steel), By Process (Sand Casting, Die Casting), By Application (Automotive, Industrial Machinery, Pipe, Fittings & Valves, Power & Electrical, Sanitary) & Forecast, 2024 – 2032*, GLOB. MKT. INSIGHTS (June 2024), <https://www.gminsights.com/industry-analysis/iron-and-steel-casting-market> (“Asia Pacific dominated the iron & steel casting market in 2023 . . . Countries such as China, India, and Japan are leading contributors to market growth, with substantial investments in construction, automotive, and manufacturing sectors.”).

available domestically.⁸³ Yet, “all the mandates, waivers, and ‘box ticking’” add uncertainty, time, and cost to government procurement and federally-led development.⁸⁴ The Federal Highway Administration projected that “some of the new BABA requirements could cost more than \$700 million a year to implement, although the agency admitted it didn’t calculate the expense of compliance and delays.”⁸⁵ Thus, federal grant requirements require a bit of flexibility to account for the realities on the ground so that money can be obligated and invested into projects.⁸⁶

C. Davis Bacon Act

As a Clean Air Act (CAA) program, GGRF construction activities must comply with the prevailing wage requirements of the Davis Bacon Act (DBA).⁸⁷ The DBA requires “all laborers and mechanics employed by contractors and subcontractors performing construction work under federal contracts in excess of \$2,000 pay their laborers and mechanics not less than the prevailing wage and fringe benefits for the geographic location.”⁸⁸ The DBA is designed to create middle-class jobs with livable wages for blue-collar workers across the country as the U.S. ramps up infrastructure development. Additionally, the DBA protects against unethical contractors undercutting the local workforce, shoddy construction, construction site accidents due to an unskilled and untrained workforce and cost over-runs and delays.⁸⁹

The definition of “construction activities” applies generally; it can include common projects such as installing solar panels and heat pumps, and energy efficiency building retrofits.⁹⁰ However, whether pre-construction

83. See Glock, *supra* note 69.

84. *Id.*; Erhlich, *supra* note 59 (“Put simply, there is uncertainty, and in construction, that means increased costs because contractors must account for that in their bids to mitigate risk.”).

85. Glock, *supra* note 69.

86. Wulf, *supra* note 60, at 4.

87. *EPA’s Implementation Framework*, *supra* note 21, at 8. (“Section 314 of the Clean Air Act requires that construction projects funded under the Clean Air Act comply with the Davis Bacon Act. As a Clean Air Act program, GGRF construction activities will be subject to prevailing wage requirements, where applicable.”).

88. *Id.*

89. *Davis Bacon Act and Prevailing Wage Laws Fact Sheet: Davis-Bacon Prevailing Wage Requirements*, LIUNA LABORER’S INT’L UNION OF N. AM., <https://www.liuna.org/prevailing-wage-and-davis-bacon> (last visited Nov. 16, 2024).

90. *NCIF & CCA FAQs for Selected Applicants*, EPA (June 3, 2024), <https://vjel.vermontlaw.edu/wp-content/uploads/2025/01/NCIF-CCA-FAQs-for-Selected-Applicants-Farmen-Mrus-Article-Supplement.pdf>.

development work triggers the DBA depends on the nature of that work.⁹¹ The DBA extends beyond commercial projects, too. The DBA statute governing the use of funds under the CAA is broad and extends to all construction projects funded under the GGRF, including single-family residential construction projects.⁹² Four distinct types of construction work exist under DBA: Building, Heavy, Highway, and Residential.⁹³

Reporting requirements under the DBA differ between the construction contractors and the GGRF fund recipients.⁹⁴ The “contracting agency” is required to collect and review the “weekly certified payrolls and ‘Statement of Compliance’ submitted [] by the prime Contractor.”⁹⁵ This review should verify compliance with the DBA, including “ensuring the use of the correct wage rate determination, proper work classification, number of hours worked, and hourly rate of pay for each employee on a project.”⁹⁶ Further, the recipient and any subrecipient are responsible for “maintaining organized, accessible records of all weekly certified payrolls (including the requirement to preserve such records for a minimum of 3 years after project completion).”⁹⁷ Separately, “the Recipient is responsible for aggregating select information⁹⁸ from weekly certified payrolls for all covered projects under its program [] and reporting them to EPA” on a semi-annual basis.⁹⁹

91. *NCIF & CCA FAQs*, *supra* note 90, at 37 (“Pre-construction activities such as environmental assessments, site acquisition, permitting, and engineering and design work do not in and of themselves trigger DBRA. Site preparation activities such as remediation of contaminated soil, abatement of asbestos or lead based paint, demolition, and similar construction activities are subject to DBRA.”).

92. *Id.* (“Some federal grant programs have statutory authority that provides for exclusions to DBRA labor standards on single-family residential construction projects. There are no similar exclusions in Section 314 of the Clean Air Act.”).

93. *Residential Construction*, DEP’T OF LAB. WAGE & HOUR DIV., <https://www.dol.gov/agencies/whd/government-contracts/construction/surveys/residential> (last visited Nov. 16, 2024).

94. *NCIF & CCA FAQs*, *supra* note 90, at 40 (“It is important to draw a distinction between the DBRA reporting that construction Contractors must submit to the ‘contracting agency’ (Recipient or Subrecipient) versus the summary DBRA reporting that the Recipient will submit to their EPA Project Officer on a semi-annual basis as part of the performance reports.”).

95. *Id.*

96. *Id.*

97. *Id.*

98. *Id.* (“Aggregated by month and DBRA construction type (‘Residential’ or ‘Business’): 1. Total number of projects, 2. Total number of workers, 3. Total hours worked, 4. Rate of pay (per worker median), 5. Share of workers above DBA prevailing wage.”).

99. *NCIF & CCA FAQs*, *supra* note 90, at 40.

D. Implementation Issues: DBA

Some critics¹⁰⁰ of the DBA argue that its methodology is outdated and flawed, and results in inflated wage expenses.¹⁰¹ A 2022 industry-funded study¹⁰² estimated that the DBA costs taxpayers \$21 billion per year, increases the cost of construction by 7.2%, and increases construction workforce wages by 20.2%.¹⁰³ Other studies, however, have found more modest increases, and that work productivity gains largely offset costs related to prevailing wage mandates.¹⁰⁴

In addition to direct cost increases due to wage increases, “contractors will incur costs related to administrative compliance with the DBA.”¹⁰⁵ The DBA requires contractors and subcontractors to comply with numerous requirements and to maintain records to verify compliance.¹⁰⁶ Therefore, contractors that want to participate in programs subject to the DBA will incur costs for transition, maintenance and operation, and administration.¹⁰⁷ Such administrative costs may include the following: new payroll systems, payroll

100. See, e.g., William F. Burke & David G. Tuerck, *The Federal Davis-Bacon Act: Mismeasuring the Prevailing Wage*, BEACON HILL INST. (May 16, 2022), <https://www.beaconhill.org/BHIStudies/2022/FINAL-BHI-DBA-2022-05-16.pdf>; HAYLEY RAETZ ET AL., THE HARD COSTS OF CONSTRUCTION: RECENT TRENDS IN LABOR AND MATERIAL COSTS FOR APARTMENT BUILDINGS IN CALIFORNIA, UC BERKELEY 2 (Mar. 2020), https://ternercenter.berkeley.edu/wp-content/uploads/pdfs/Hard_Construction_Costs_March_2020.pdf; James Sherk, *Labor Department Can Create Jobs by Calculating Davis-Bacon Rates More Accurately*, HERITAGE FOUND. (Jan. 21, 2017), <https://www.heritage.org/jobs-and-labor/report/labor-department-can-create-jobs-calculating-davis-bacon-rates-more>; *Studies on the Negative Impact of the Davis-Bacon Act and Prevailing Wage Policies*, ASSOCIATED BUILDERS AND CONTRACTORS, <https://www.abc.org/Portals/1/2023/Politics%20Policy/DavisBacon/ABC%20Prevailing%20Wage%20Davis%20Bacon%20Studies%20Summary%20Updated%20January%202023.pdf?ver=MV0choINm20wd5Mr60SxMw%3d%3d×tamp=1673554159098#> (last updated Jan. 2023).

101. Vero Bourg-Meyer, *Davis-Bacon Primer for States Implementing the Greenhouse Gas Reduction Fund Solar for All Program*, CLEAN ENERGY STATES ALL. 16 (Jan. 11, 2024), <https://www.cesa.org/wp-content/uploads/Davis-Bacon-Primer-GGRF-Solar-for-All.pdf>.

102. *DOL Increases Costs for Contractors and Taxpayers with Davis-Bacon Final Rule*, ASSOCIATED BUILDERS AND CONTRACTORS (Aug. 9, 2023), <https://www.abc.org/News-Media/Newsline/dol-increases-costs-for-contractors-and-taxpayers-with-davis-bacon-final-rule#>.

103. Bourg-Meyer, *supra* note 101, at 16.

104. Betony Jones, *Prevailing Wage in Solar Can Deliver Good Jobs While Keeping Growth on Track*, UC BERKELEY LAB. CTR. (Nov. 12, 2020), <https://laborcenter.berkeley.edu/prevailing-wage-in-solar-can-deliver-good-jobs-while-keeping-growth-on-track/>.

105. Bourg-Meyer, *supra* note 101, at 16.

106. The authors discuss the numerous responsibilities of contractors under the DBA: Beyond wages and benefits, DBA requires that contractors and subcontractors comply with weekly payment schedules, maintain payrolls and records that list specific job classifications, wages, and time spent in detail, submit weekly records for all weeks in which contract work is performed and certify payrolls using WHD forms, keep records for three years after the end of a project, periodically review processes and documentation to ensure compliance with applicable prevailing wages, including with subcontractors, and perform audits. *Id.* at 16.

107. Bourg-Meyer, *supra* note 101, at 16.

administrators, reporting analysts, subcontractor auditing systems and processes, and modification of internal policies and employee handbooks.¹⁰⁸

Outside of additional administrative and labor costs, contractor experience is another crucial factor. While compliance with DBA may not be an issue for more experienced contractors with portfolios of larger projects, residential contractors likely do not have the same experience of complying with DBA federal requirements. In fact, it may prove devastating for small contractors working on federal contracts. Testifying before the U.S. House Committee on Small Business, Mario Burgos of Prairie Band LLC stated that the U.S. Department of Labor's (DOL) rulemaking¹⁰⁹ updating the DBA will "only make compliance challenges worse, driving small contractors out of public works projects or even out of business."¹¹⁰ For Burgos and small businesses alike, the ever-changing and ever-increasing federal and state regulatory requirements excessively burden small contractors, forcing some to shut down. Burgos remarked, the DBA "is just the latest example of additional burdens and barriers erected, which make it more difficult for small businesses to participate in the economic investments of the [BIL] . . ." ¹¹¹ And with small businesses comprising over half of the construction industry, the DBA is sure to make waves.¹¹²

Residential projects will face the greatest barrier with the DBA prevailing wage requirements due to project size as well as the fact that smaller, local contractors may not have experience working and complying with the DBA. There is a long history of government contractors and other larger contractors satisfying the DBA requirements to get work done.¹¹³ The next few years will determine whether smaller contractors in the residential sector can get up to speed on DBA compliance. This will determine whether DBA compliance results in a stronger middle class created from well-paying jobs, or a lack of deployment of GGRF funds in the residential market.

108. Bourg-Meyer, *supra* note 101, at 16.

109. 29 C.F.R. pt. 1 (2024); 29 C.F.R. pt. 3 (2024); 29 C.F.R. pt. 5 (2024).

110. *New Davis-Bacon Rule Will Devastate Small Construction Contractors Working on Federal Contracts*, ASSOCIATED BUILDERS & CONTRACTORS (Oct. 19, 2023), <https://www.abc.org/News-Media/News-Releases/abc-new-davis-bacon-rule-will-devastate-small-construction-contractors-working-on-federal-contracts>.

111. *Id.*

112. Christine Tracey, Comment, *An Argument for the Repeal of the Davis-Bacon Act*, 5 J. SMALL & EMERGING BUS. L. 285, 287 (2001).

113. See generally Frank Osborn, *Five Facts on Davis-Bacon Wages Every Contractor Needs to Know*, FOUND. SOFTWARE (Jan. 3, 2019), <https://www.foundationsoft.com/learn/tips-davis-bacon/> ("Contractors who complete this 'Davis-Bacon Wage Survey' provide DOL's primary source of information for making Davis-Bacon wage determinations . . . Therefore, it's in contractors' best interest to return data whenever possible . . ."); *But see What Is the Davis Bacon Act of 1931?*, INTUIT QUICKBOOKS, <https://quickbooks.intuit.com/time-tracking/resources/what-is-davis-bacon-act/> ("There have been over 119,000 reported violations of the Davis Bacon Act over the last 32 years . . .").

E. Disadvantaged Business Enterprises

The requirements of the Disadvantaged Business Enterprises (DBE) program apply to procurement under EPA financial assistance agreements performed in the U.S., “whether by a recipient or its prime contractor, for construction, equipment, services and supplies.”¹¹⁴ Under EPA’s 8%¹¹⁵ and 10%¹¹⁶ statutes, an entity must establish that it is 8–10% “owned and controlled by socially and economically disadvantaged individuals who are of good character and citizens of the United States.”¹¹⁷ To meet these objectives, recipients are required to make six good faith efforts¹¹⁸ whenever procuring construction, equipment, services, and supplies under an EPA financial assistance agreement.¹¹⁹ To document compliance with the six good faith efforts, recipients could provide, for example, use of current bidders/solicitation list or databases that include DBEs; how DBEs were made aware of the solicitation; samples of letters or records of communication with DBEs; sample of advertisement and duration of advertisement; and so on.¹²⁰

114. 40 C.F.R. § 33.102.

115. Codified at 42 U.S.C. § 4370d.

116. Codified at 42 U.S.C. § 7601 note (Disadvantaged Business Concerns).

117. *Disadvantaged Business Enterprise Program Requirements*, EPA, <https://www.epa.gov/grants/disadvantaged-business-enterprise-program-requirements> (“The statute[s] presume[] HBCUs, Black Americans, Hispanic Americans, Native Americans, Women, and Disabled Americans are socially and economically disadvantaged individuals.”) (last updated Sept. 1, 2023).

118. These good faith efforts include the following:

- (1) Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State, and Local Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources;
- (2) Make information on forthcoming opportunities available to DBEs, arrange time frames for contracts, and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date;
- (3) Consider in the contracting process whether firms competing or large contracts could subcontract with DBEs. For Indian Tribal, State, and Local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process;
- (4) Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually;
- (5) Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce; and
- (6) If the prime contractor awards subcontracts, require the prime contractor to take the steps in items 1 through 5. *Id.*

119. *Id.*

120. For a more complete list of examples of compliance, see *Frequently Asked Questions for Disadvantaged Business Enterprises*, EPA (last updated Feb. 14, 2024), <https://www.epa.gov/grants/frequently-asked-questions-disadvantaged-business-enterprises#q06>.

Entities that meet the certification criteria under at least one of the EPA statutes¹²¹ are qualified for EPA's DBE program.¹²²

A recipient may apply for a waiver from any of the requirements that are not specifically based on a statute or Executive order by submitting a written request to the Director of the Office of Small and Disadvantaged Business Utilization (OSDBU).¹²³ The request must document "special or exceptional circumstances that make compliance with the requirement impractical, including a specific proposal addressing how the recipient intends to achieve the objectives of this part as described in section 33.101."¹²⁴ The OSDBU Director has the authority to approve a recipient's request¹²⁵ and end a program waiver at any time upon notice to the recipient and require the recipient's compliance.¹²⁶ Further, the Director may extend the waiver if they determine that all requirements continue to be met.¹²⁷

If a recipient fails to comply with any requirements, EPA may take remedial action under 2 CFR § 200.339.¹²⁸ This includes, but is not limited to, "temporarily withholding cash payments pending correct of the deficiency by the recipient, disallowing all or part of the cost of the activity or action not in compliance, wholly or partly suspending or terminating the current award, or withholding further awards for the project or program."¹²⁹

F. Implementation Issues: DBE

Complying with DBE requirements may be easier than other GGRF requirements for grant recipients and contractors, so waivers and enforcement actions will likely be rare occurrences. This is not to say that DBE requirements are unenforceable and unproblematic. For instance, it can be difficult for small businesses to hear about current contracting opportunities, especially those that are not connected to existing contractors or procurement agencies.¹³⁰ Adopting more user-friendly processes and

121. I.e., EPA 8% or 10% statutes.

122. *Frequently Asked Questions for Disadvantaged Business Enterprises*, EPA (last updated Feb. 14, 2024), <https://www.epa.gov/grants/frequently-asked-questions-disadvantaged-business-enterprises#q06> [hereinafter *FAQs for Disadvantaged Businesses*].

123. 40 C.F.R. § 33.103(a) (2024).

124. *Id.* at § 33.104(b).

125. *Id.* at § 33.104(c).

126. *Id.* at § 33.104(d).

127. *Id.*

128. 40 C.F.R. § 33.105.

129. *Id.*

130. Theodos et al., *Removing Barriers to Participation in Local and State Government Procurement and Contracting for Entrepreneurs of Color*, URB. INST. 1, 6 (2024), <https://www.urban.org/sites/default/files/2024->

technology can take time, but are generally worth the investment.¹³¹ Upon failure to meet DBE requirements, EPA may take remedial action under 2 CFR § 200.339.¹³² Therefore, these good faith efforts must be taken seriously, but complying with them is not an insuperable task.

Many states have established programs that focus on getting financing, renewable energy upgrades and benefits, and other support to disadvantaged communities, marginalized groups, and low- to moderate-income families.¹³³ States that already have such programs in place, like Connecticut, may be in a prime position to comply with DBE. States without such programs may find it more difficult to comply with DBE.

G. National Environmental Policy Act

The National Environmental Policy Act (NEPA) was one of the “first laws ever written that establishes the broad national framework for protecting our environment.”¹³⁴ NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.¹³⁵ Section 102 in Title I of the Act requires federal agencies to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment.¹³⁶

However, Section 7(c) of the Energy Supply and Environmental Coordination Act of 1974¹³⁷ exempts all actions under the CAA from the requirements of NEPA.¹³⁸ As a grant program authorized under the CAA, NEPA will not apply to GGRF projects, unless part of a project is also carried

04/Removing%20Barriers%20to%20Participation%20in%20Local%20and%20State%20Government%20Procurement%20and%20Contracting%20for%20Entrepreneurs%20of%20Color.pdf.

131. Theodos et al, *supra* note 130, at 11 (“[S]everal jurisdictions we interviewed saw higher numbers of MBEs submitting bids, quotes, or proposals as a result.”).

132. 40 C.F.R. § 33.105 (2024); See *FAQs for Disadvantaged Businesses*, *supra* note 122 for examples of EPA remedial measures.

133. *Directory of State Low- and Moderate-Income Clean Energy Programs*, CLEAN ENERGY STATES ALL. (last updated June 2021), <https://www.cesa.org/resource-library/resource/directory-of-state-low-and-moderate-clean-energy-programs/> (listing states such as NJ, CA, CO, MA, ME, and NY).

134. *Summary of the National Environmental Policy Act*, EPA, <https://www.epa.gov/laws-regulations/summary-national-environmental-policy-act> (last updated Sept. 6, 2023).

135. *What Is the National Environmental Policy Act?*, EPA, <https://www.epa.gov/nepa/what-national-environmental-policy-act#> (last updated July 15, 2024).

136. *Id.*

137. Codified at 15 U.S.C. § 793(c)(1).

138. EPA, EPA’S IMPLEMENTATION FRAMEWORK FOR THE GREENHOUSE GAS REDUCTION FUND (2023), https://www.epa.gov/system/files/documents/2023-04/GGRF%20Implementation%20Framework_730am.pdf; 15 U.S.C. § 793(c)(1) (“No action taken under the Clean Air Act shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969.”).

out with funding from another federal agency.¹³⁹ As a result, NEPA should not present any barriers to deployment of GGRF funds.

H. National Historic Preservation Act

The National Historic Preservation Act (NHPA) requires federal agencies to consider the effect¹⁴⁰ of their undertakings¹⁴¹ on historic properties.¹⁴² Specifically, Section 106 of the NHPA aims to “identify historic properties¹⁴³ potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize, or mitigate any adverse effect¹⁴⁴ to historic properties.”¹⁴⁵

A Section 106 review is required under NEPA for Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements.¹⁴⁶ The review begins by determining whether the proposed undertaking is an activity that could cause effects to historic properties.¹⁴⁷ Projects that involve earth disturbances or construction activities can affect historic properties.¹⁴⁸ These projects must then undergo further review, considering the actions potential for both direct and indirect effects on historic properties and Section 106 consultation.¹⁴⁹ The review will result in one of the following determinations: (1) “no historic properties affected;”

139. EPA, *supra* note 138.

140. 36 C.F.R. § 800.16(i) (2024) (An “effect” is defined as an “alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.”).

141. 36 C.F.R. § 800.16(y) (2024) (An “undertaking” is defined as “a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.”).

142. 36 C.F.R. § 800.1(a) (2024); *National Historic Preservation Act (NHPA) Section 106*, EPA, <https://www.epa.gov/system/files/documents/2023-07/NHPA-Overview.pdf> (last visited July 24, 2024) [hereinafter *NHPA*].

143. 36 C.F.R. § 800.16(l)(1) (2024) (A “historic property” is defined as the following: “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.”).

144. 36 C.F.R. § 800.5(a)(1) (2024) (An “adverse effect” is an effect that would “diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.”).

145. 36 C.F.R. § 800.1(a) (2024); *NHPA*, *supra* note 142(b).

146. *NHPA*, *supra* note 142(b).

147. *Id.*

148. *Id.*

149. *NHPA*, *supra* note 142(b) (explaining that the “alteration or removal of a resource” can be a direct effect of an action and describing that the “introduction of modern intrusions to the viewshed of a resource, such as the addition of a modern facility in a historic district, or other impacts to the scenic values of the resource” can be an indirect effect of an action).

(2) “no adverse effect to historic properties;” or (3) “adverse effect to historic properties.”¹⁵⁰

Grant recipients have two options. Either demonstrate compliance or “assist EPA with complying with Section 106 for a project.”¹⁵¹ Once a recipient decides to apply for an EPA-funded grant, the recipient should collaborate with the EPA to determine the level of involvement in the Section 106 process.¹⁵² The onus is on the recipient to provide EPA with the information “needed to properly characterize impacts.”¹⁵³

I. Implementation Issues: NHPA

Complying with the NHPA will likely not pose a major obstacle to deployment of GGRF funds but will require greater attention in certain regions that have an older building stock. If any undertaking¹⁵⁴ does not affect historical properties, then NHPA requirements will not apply. Regardless, project developers will have to undergo site assessments to determine if NHPA is triggered anyway.

However, the historical particularities of certain regions, namely the Northeast, may make compliance with NHPA more difficult. The Northeast is home to most of the Nation’s old homes.¹⁵⁵ While properties under 50 years old can be listed in the National Register of Historic Places for being “exceptionally important,” most eligible properties are at least 50 years old.¹⁵⁶ Therefore, many Northeastern buildings that want renewable energy or energy efficiency upgrades will likely trigger NHPA review.

A model for effective streamlining exists to prioritize federal fund obligations. The American Recovery and Reinvestment Act (ARRA) marked

150. *NHPA*, *supra* note 142(b).

151. *Id.*

152. *Id.*

153. *Id.*

154. *Id.* (An undertaking is “[a] project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.”).

155. David Heacock, *U.S. Cities with the Largest Share of Homes Built Prior to 1940*, FILTERBUY, <https://filterbuy.com/resources/across-the-nation/cities-with-oldest-homes/#> (last visited Nov. 17, 2024); Coty Perry, *The Median Age of Homes in the United States by Build Year [Data Study]*, Today’s Homeowner, <https://todayshomeowner.com/home-finances/guides/median-home-age-us/> (last updated Apr. 9, 2024) (explaining NY, RI, MA, PA, and CT have the oldest median home age, ranging from 55–60 years old).

156. *National Register of Historic Places FAQs*, NAT’L PARK SERV., <https://www.nps.gov/subjects/nationalregister/faqs.htm#> (last updated Sept. 5, 2024).

the beginning of the fast-tracking era.¹⁵⁷ The government fast-tracked permitting processes to use ARRA funds to “further the goal of rapidly installing renewable energy projects on public lands as part of a concerted effort to promote America’s ‘green energy future.’”¹⁵⁸ The contemporary political and economic environments also contributed to the impetus for fast-tracking. It was the “need for recession recovery [that] created strong reasons for approving projects in short time periods and for spending money as quickly as possible.”¹⁵⁹ The same political and economic rationales exist today. Thus, instead of piecemeal NHPA reviews, projects could be aggregated to be reviewed collectively to quickly assure compliance so funds can be deployed. Such a streamlined review process would allow projects to obtain compliance and not get bogged down in potential “endless feedback loops” of mismanaged Programmatic Agreements.¹⁶⁰

J. Justice40

The GGRF falls under the Justice40 initiative.¹⁶¹ Every GGRF competition “will align with the Justice40 initiative, ensuring that 40% of the overall benefits from the program flow to disadvantage communities.”¹⁶² Applicants will be evaluated by EPA on their “plans and capabilities for deploying this grant funding to improve equity and environmental justice.”¹⁶³ Grantees must also regularly report the benefits they have delivered to low-income and disadvantaged communities.¹⁶⁴ Because of the alignment

157. Nathaniel Logar, Note, *When the Fast Track Hits the Off Ramp: Renewable Energy Permitting and Legal Resistance on Western Public Lands*, 27 COLO. NAT. RES., ENERGY & ENV'T L. REV. 361, 374–375 (2016) (“Under this initiative, the Bureau of Land Management (“BLM”) assigned twenty-four large tracts of land as Solar Energy Study Areas to be evaluated for environmental sensitivity and renewable resources suitability. The aggregated tracts of land were then permitted under an expedited process.”)

158. *Id.* at 374 (quoting Press Release, Bureau of Land Mgmt., *BLM Concentrating on Renewable Energy Projects That Could Meet Stimulus Funding Deadline* (Dec. 29, 2009), <http://www.blm.gov/wo/st/en/info/newsroom/2009/december/0.html>).

159. *Id.* at 385.

160. Glenn Darrington, *Programmatic Agreements—Streamlining the Section 106 Process Guide*, POWER ENGRS (May 30, 2019), <https://cdn2.hubspot.net/hubfs/4836571/Prismic%20Files/Currents%20Spring%202019/Sect.%20106%20Process%20final.pdf>; 36 C.F.R. § 800.14(b) (explaining Programmatic Agreements “govern the implementation of a particular program or the resolution of adverse effects from certain complex project situations or multiple undertakings.”).

161. *EPA’s Implementation Framework*, *supra* note 21, at 8–9.

162. *Id.*

163. *EPA’s Implementation Framework*, *supra* note 21, at 8–9.

164. *See id.* (“EPA expects to define ‘low-income and disadvantaged communities’ as inclusive of geographically defined disadvantaged communities identified through the Climate and Economic Justice Screen Tool (CEJST), and inclusive of the limited supplemental set of census block groups that are at or

between GGRF programs and Justice40 goals, this requirement should not pose any barriers to deployment of GGRF funds. However, it is unclear whether there are enough shovel-ready projects in these target areas to facilitate deploying GGRF funds. Thus, worthy policy goals must be balanced with the practicalities of GGRF fund deployment.

III. EXTERNAL PRESSURES ON THE GGRF

The GGRF's success depends not only on its participants' ability to navigate and comply with the numerous requirements, but also on political and judicial externalities. Namely, the 2024 presidential election and the overruling of *Chevron*.¹⁶⁵ These two externalities will affect the GGRF to some degree, adding more uncertainty and complication.

A. 2024 Presidential Election

Any federal election can shift program oversight as new administrations implement their priorities. However, the 2024 presidential election brings a level of uncertainty with regards to programs like the GGRF. With diverging climate and energy goals between Democrats and Republicans, President Donald Trump's election may heavily influence the degree of governmental support for clean energy policy.

President Trump's advisors have indicated that dismantling the IRA sits at the top of his agenda.¹⁶⁶ However, a wholesale repeal of the IRA may be unlikely due to its success and the bipartisan support of non-GGRF components in the IRA such as investment tax credits.¹⁶⁷ As more and more renewables projects, mineral processing facilities, battery plants, and electric vehicle factories bring jobs and tax revenue to Republican-majority states, "the politics around clean energy are shifting."¹⁶⁸

above the ninetieth percentile for EJ Screen's Supplement Indexes."). *See also* Said et al., *supra* note 10 ("The [DOE] now requires developers to submit community benefits plans as part of all BIL and IRA funding opportunities and loan applications . . . If a developer is selected to receive funding, its CBP will be part of the contractual agreement.").

165. *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

166. James Temple, *Trump Wants to Unravel Biden's Landmark Climate Law. Here Is What's Most at Risk*, MIT TECH. REV. (Feb. 26, 2024), <https://www.technologyreview.com/2024/02/26/1088921/trump-wants-to-unravel-bidens-landmark-climate-law-here-is-whats-most-at-risk/>.

167. Temple, *supra* note 166 ("By some accounts, the law has helped spur hundreds of billions of dollars in private investment into projects that could create nearly 200,000 jobs—and get this: eight of the ten congressional districts set to receive the biggest clean-energy investments announced in recent quarters are led by Republicans . . .").

168. *Id.*

However, given the outcome of the 2024 election,¹⁶⁹ Republicans will have the political power to effect change come Inauguration Day. Further, President Trump's nominee for EPA administrator, Lee Zeldin,¹⁷⁰ could make GGRF requirements more burdensome if it is a priority. Despite this, if the Department of Energy (DOE) and EPA worked fast enough, GGRF funds could be spent or obligated before the new administration makes the requirements more burdensome.¹⁷¹ EPA must also cement protections on air, climate, and water to avoid a Republican-led Congress and White House from burying those rules. Rules not completed by early 2024 could be overruled by the inbound administration under the Congressional Review Act.¹⁷² Ultimately, only time will tell whether President Trump's second term will affect EPA in obligating GGRF funds.

B. *The Chevron Deference Issue*

The *Chevron* decision marked a massive victory for the regulatory state and established the start of forty years of environmental and administrative precedent. Courts and scholars cited *Chevron* over “19,000 times, making it the third-most cited civil case ever.”¹⁷³ However, legal scholars saw the writing on the wall that the current Supreme Court would continue to limit and eventually overturn the long-standing precedent.¹⁷⁴

Overruling *Chevron*¹⁷⁵ has incredibly expansive implications, especially for environmental and energy arenas. ClearView Energy Partners analysts

169. Tracy Grant & Brian Duignan, *United States presidential election of 2024*, BRITANNICA (last updated Nov. 25, 2024), <https://www.britannica.com/event/United-States-presidential-election-of-2024#ref397331> (summarizing Trump's victory over Harris in the 2024 presidential election); Riley Beggin, *Trump's dream scenario: Republicans win control of House and Senate in Congress sweep*, USA TODAY (Nov. 13, 2024), <https://www.usatoday.com/story/news/politics/elections/2024/11/13/republicans-win-house-senate-2024/7573440007/> (describing Republicans winning control of Congress in the 2024 election).

170. Elena Moore, *Trump picks former Rep. Lee Zeldin to be his EPA administrator*, NPR (Nov. 11, 2024), <https://www.npr.org/2024/11/11/nx-s1-5187039/trump-lee-zeldin-epa-environment>.

171. Temple, *supra* note 166.

172. Kevin Bogardus, *'Maximum Urgency and De Facto Risk' – EPA Braces for 2024*, POLITICO: E&E NEWS (Jan. 12, 2024), <https://www.eenews.net/articles/maximum-urgency-and-de-facto-risk-epa-braces-for-2024/>.

173. John P. Elwood et al., *Chevron Overturned: What Does It Mean for Life Sciences Companies?*, ARNOLD & PORTER (July 1, 2024), <https://www.arnoldporter.com/en/perspectives/advisories/2024/06/chevron-overturned#>.

174. See, e.g., Kristin E. Hickman & Aaron L. Nielson, *Narrowing Chevron's Domain*, 70 DUKE L. J. 931 (Feb. 2021); Nathan Richardson, *Deference Is Dead (Long Live Chevron)*, 73 RUTGERS U. L. REV. 441 (2021); Kristin E. Hickman & Aaron L. Nielson, *The Future of Chevron Deference*, 70 DUKE L. J. 1015 (Feb. 2021).

175. In *Loper Bright Enterprises v. Raimondo*, the Supreme Court held that the Administrative Procedure Act (“APA”) requires courts to exercise their *independent judgment* in deciding whether an

suggest *Loper Bright* may have “significant implications for U.S. energy infrastructure on its own.”¹⁷⁶ *Chevron* provided a degree of certainty to investors about the durability of new agency rules. But without *Chevron*, investors may be wary to invest, and regulated entities “may forego early compliance with anticipated or pending regulations.”¹⁷⁷ Most importantly, a regulated entity’s “interpretation of a statute could be given just as much weight as the agencies.”¹⁷⁸ Additionally, litigation timelines may be extended because “judges will no longer be able to rely on agency expertise when writing decisions on often technical and complex issues.”¹⁷⁹

Thus, investors and developers face uncertainty not only from the baseline of federal requirements and compliance with them, but also from the 2024 presidential election and from recent Supreme Court decisions. While neither the election nor Supreme Court decisions should pose an immediate threat to GGRF requirements and funding, these pressure points must still be kept in mind.

CONCLUSION

The IRA is already having significant impacts on clean-energy finance and development. The GGRF is positioned to have similar impacts. Billions of dollars are primed for deployment into shovel-ready projects. However, to get shovels in the ground, program participants must successfully navigate and comply with GGRF requirements.

Whether the GGRF can match other IRA provisions’ success depends primarily on three factors. First, states, developers, contractors, and financiers must be able to navigate federal requirements to deploy money. Second, GGRF requirements must feasibly allow participants to comply without drastically increasing material, labor, and administrative costs. Finally, this feasibility must not exclude disadvantaged groups from participating and receiving direct benefits. If these three factors align, then America can achieve significant progress in the campaign toward securing a clean energy economy.

agency has acted within its statutory authority, and courts *may not defer* to an agency interpretation of the law simply because a statute is ambiguous. As a result, *Chevron* was overruled. *Loper Bright Enterprises v. Raimondo*, 144 S. Ct. 2244 (2024) (emphasis added).

176. Ethan Howland, *Supreme Court’s Chevron, Corner Post Decisions Could Delay Energy Investments, Spur Litigation: Analysts*, UTILITY DIVE (July 2, 2024), <https://www.utilitydive.com/news/supreme-court-chevron-corner-post-energy-sector-ferc-transmission/720413/>.

177. *Id.*

178. *Id.*

179. *Id.*