



CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

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**[FR Doc. 2024-02042](#): Response to Draft Programmatic Environmental Assessment for Modernization and Internal Expansion of Existing Semiconductor Fabrication Facilities Under the CHIPS Incentives Program**

The BlueGreen Alliance (BGA) unites the nation's labor unions and environmental organizations to solve today's environmental challenges in ways that create and maintain quality jobs and build a stronger, fairer economy. Our partnership is firm in its belief that we don't have to choose between a good job and a clean environment—we can and must have both. BGA welcomes this extended opportunity to comment on the [Draft Programmatic Environmental Assessment \(PEA\)](#)<sup>i</sup> for Modernization and Internal Expansion of Existing Semiconductor Fabrication Facilities under the CHIPS Incentives Program. The document's authors are to be commended for their comprehensive overview of the semiconductor industry and analysis of the direct, indirect, and cumulative effects of possible CHIPS-supported projects.

Below we lay out opportunities to more fully realize the administration's objectives in nurturing good jobs, healthy communities, and a fairer economy. BGA strongly urges the incorporation of these crucial elements in any future PEAs. In addition, as a result of the prevalence of wage theft on construction projects of this magnitude, it is imperative that DOC has a plan to work with the Department of Labor and Office of Federal Procurement Policy, Contract Labor Advisor Group (CLAG) to establish an office with designated staff to deliver a robust plan to enforce Davis-Bacon Act and Related Acts (DBRA) and other labor provisions in CHIPS.

**Recommendations for the Final Programmatic Environmental Assessment**

**National Environmental Policy Act (NEPA)**

As part of the NEPA process, the Department of Commerce is required to review environmental, social, and economic data related to the proposed project. In NEPA, Congress declared: *"It is the continuing policy of the Federal Government...to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans."*

To create these conditions, it is imperative that Commerce plays a role in ensuring that the positive impacts of semiconductor manufacturing are maximized and delivered equitably while using the best available science and data to establish measures to avoid, minimize, mitigate, and monitor environmental and impacts as well as their social Implications. This will require that the recipients of CHIPS Incentives Program funding ensure the application of high-road employment practices, community benefits agreements, best management practices, and other means to

ensure that projects are developed in an environmentally responsible manner and that benefits are maximized and equitably distributed. We believe that this depth of assessment is aligned with the Draft PEA, which is already considering some socioeconomic factors such as job creation and community impacts. These requirements, paired with President Biden's commitments to union labor, environmental justice, and the protection of natural resources should result in a thorough analysis that ensures communities and workers realize project benefits while protecting communities and the environment from adverse impacts. Given this scope, we urge Commerce to consider the following recommendations to further clarify environmental and socioeconomic impacts in the final PEA, and any other future CHIPS Incentive Program PEAs.

### **Creating accessible, high-quality union jobs**

The DOL's [Good Jobs Initiative](#) highlights equity and job quality principles and metrics to be used in federal grant making processes that should be strongly considered by the CHIPS Incentive Program for use in this and future PEAs. The equity and job quality principles include **proactively addressing racial equity; reducing barriers to opportunity; supporting the creation of good-paying jobs with the free and fair choice to join a union; providing opportunities for all workers—including underrepresented workers—to be trained in and placed in good-paying jobs directly related to the Project; utilization of Project Labor Agreements (PLAs) and/or Local Hire provisions, training and placement programs for underrepresented workers; and adopting an equity and inclusion program/plan focused on procurement, material sourcing, construction, inspection and hiring.** These are great examples of metrics related to equity and job quality and should be considered for evaluating the job creation benefits associated with this semiconductor manufacturing.

Specifically, the PEA should provide a more robust assessment of the following categories related to jobs and job training:

#### ***Manufacturing***

Maximizing the creation of manufacturing jobs across a domestic semiconductor supply chain is key for this industry to fulfill its economic benefit potential. The Draft PEA and any future PEAs should **specify job categories and job numbers per category resulting from each domestically manufactured component, specifying the minimum hourly wages and benefits to be paid in each category, as well as how these numbers are accounted for in the total number of direct, indirect, and induced jobs, gross state product, and anticipated personal income.** The PEA should specify how benefits are calculated and explain and quantify each item included in benefit calculations. The PEA should also include an **assessment of education and certifications necessary to access each job category, the training, minimum and average wages, hours, career advancement, physical demands, and safety information, as well as any commitments the company has made to ensure workers have the free and fair choice to join a union, such as through a union neutrality agreement.** This information is essential for the U.S. workforce to have equitable access to employment opportunities.

Finally, this PEA and any future PEAs should also contain information about the manufacture of semiconductor components that did not take place in the U.S., in order to understand the full breadth of employment benefits that could be expected as a domestic supply chain matures.

### ***Operations and Maintenance (O&M)***

Similarly, for O&M job impacts, the PEA should specify O&M job categories, job numbers in each category, and how job numbers are accounted for in the total number of direct, indirect, and induced jobs, gross state product, and anticipated personal income. The PEA should also include an **assessment of education and certifications necessary** to access those jobs, training, average wages, career advancement, hours, physical demands, and safety information, as well as any commitments the company has made to ensure workers have the free and fair choice to join a union, such as through a union neutrality agreement. **The PEA assessment should also indicate the number of jobs that, if any, require specialized experience that would prohibit workers in the U.S. from accessing those jobs, and the specific experience and training that is required. Any apprenticeship utilization should also be documented, and the types of apprenticeships to ensure that they are DOL-certified.**

### ***Construction***

The PEA should include all relevant construction jobs. Consistent with the previous two categories, Commerce should specify job categories, job numbers in each category, and how job numbers are accounted for in the total number of direct, indirect, and induced jobs, gross state product, and personal income. The PEA and any future PEAs should also include an assessment of education and certifications necessary to access each job category, the training, average wages, hours, career advancement, physical demands, and safety information. If any construction jobs require specialized experience that prohibit workers in the U.S. from accessing these jobs, that should also be detailed, including the number of jobs, as well as the training and experience required.

### ***Training, Demographics, & Employment Benefits***

Commerce should be sure to include detailed information regarding training, including specific dollar amounts per worker that the company will invest. One of the main mechanisms for building career pathways is through registered apprenticeship, pre-apprenticeship, and other union-affiliated training programs. Pre-apprenticeship programs aim to ensure that workers can qualify for entry into an apprenticeship program and have the skills and support they need to succeed. These programs are generally designed to target certain populations or demographics such as low-income workers, workers of color, women, and other marginalized communities. Additionally, many unions offer training throughout a member's career to enable them to stay up to date with changes in technology. The most successful pre-apprenticeship programs are those affiliated with registered apprenticeships or other contractually agreed on-the-job training programs.

Apprenticeships are registered through a state apprenticeship agency or through the Federal Department of Labor. Registered apprenticeships are paid positions that combine on-the-job training with classroom instruction in a trade. Construction unions operate robust registered apprenticeship programs while industrial unions work with employers on joint labor management training programs that also provide a combination of classroom and on-the-job skills training. When these programs are paired with recruitment strategies such as partnering with a community group to provide information about workforce and training opportunities and providing wrap-around services, the benefits can be even greater. Many examples of programs providing such services can be found in the Department of Labor's [High Road to the Middle Class map](#)<sup>ii</sup>, an evolving resource of training programs.

Commerce should also include any language access to ensure jobs are accessible to a diverse workforce. Any agreements that project developers have made to increase access, be it to jobs in

manufacturing, operations and maintenance, construction, or otherwise, should be detailed through the PEA to increase transparency and the local community's ability to access these resources and benefits.

### **Ensuring Environmental Justice**

The Biden Administration has made historic commitments to environmental justice, including the goal for 40 percent of the overall benefits of federal investments to flow to disadvantaged communities. While benefits from semiconductor manufacturing are not explicitly considered in Justice40, generally, any federal program that addresses climate change, clean energy and energy efficiency, clean transit, affordable, and sustainable housing, training and workforce development, legacy pollution, and clean water infrastructure is considered a J40 covered program. Commerce should do its due diligence to ensure that communities and tribes receive the maximum possible benefits.

Commerce should be sure to detail all information related to air and water quality associated with manufacturing, port activities, construction, and ongoing operations and maintenance. It should also include any community consultation related to adverse impacts and methods for continued community engagement around the oversight, monitoring, and structuring of mitigation plans including adaptive management strategies. Pre-construction, construction, and post-construction monitoring should be conducted, especially in areas of known vulnerability such as those adjacent to known sources of contaminants and near environmental justice communities. Commerce should include any request made by the community that are publicly available, such as, but not limited to, request for Community Benefits Agreements and community governance of projects/facilities.

### **Hazardous Substances**

Applicants for CHIPS incentives will be better informed by the PEA's distinct consideration of climate change, air quality, water quality, human health and safety, hazardous and toxic materials, hazardous waste and solid waste management, utilities, environmental justice and socioeconomics, the inclusion of water reuse, the use of safer alternatives to hazardous chemicals, process optimization, closed loop systems and other strategies to minimize environmental and human health harm and the appendixes on Per- and polyfluoroalkyl substances (PFAS) and Toxic Substances Control Act (TSCA) regulated chemicals.

However, we are concerned that the information applicants will be required to submit in their Climate and Environmental Responsibility Plans is much more limited than the potential harms and benefits described in the PEA. Requiring information on how the potential project intends to address renewable energy, resilience from weather- and climate-related risks, water conservation, transparency, and the potential for adverse impacts to the local community, including communities with environmental justice concerns, are all important aspects of the PEA. At the same time, applicants are not required to describe how they plan to reduce the use of PFAS, TSCA regulated chemicals, and other hazardous chemicals, greenhouse gases and other air emissions, and solid and hazardous waste or provide high road jobs and other socioeconomic outcomes.

The 26-question [Environmental Questionnaire](#)<sup>iii</sup> published on August 25, 2023, fills part of this gap by requiring information on the "types and quantities of air emissions (including odors or

nanoscale materials) that would be produced by the project facilities, and any measures you have identified that might mitigate these impacts.” Similarly, the August 2023 questionnaire asks applicants to “identify any measures you have identified that might mitigate” the impacts on local socioeconomic conditions and requests information on how energy efficiency, renewable energy, and other sustainability efforts will be incorporated into the effort to address greenhouse gases. While the 26 questions include asking for information regarding the types and quantities of solid wastes the facility would produce and proposed use and production of any toxic, hazardous, or radioactive substances, neither the Questionnaire nor the Climate and Environmental Responsibility Plan require any information from applicants on how they will reduce the use and production of PFAS, TSCA regulated chemicals, and other hazardous substances. Even in the PEA’s appendix on Best Management Practices (Appendix A), there are no recommendations on replacing hazardous chemicals with safer alternatives. (See Table 1 for an illustration of how the PEA and Environmental Questionnaire are asking for different information).

BGA requests that the PEA be revised to better capture information on PFAS, TSCA regulated chemicals, and other hazardous substances. The final PEA should also define transparency more broadly to include measuring and publicly reporting on use and emissions (to air and water) of all hazardous materials used or created during semiconductor production. Information collected should include a description of the engineering controls and monitoring methods and plans for reduction or substitution of toxic chemicals with less hazardous materials, waste treatment technology improvements, and how workers will be engaged and educated on how to protect themselves and others from the hazards of PFAS, TSCA regulated chemicals, and other chemicals of concern.

**Table 1. CHIPS Environmental Application Requirements**

| PEA Concern           | Draft PEA Requirement to Address this Concern  | August 2023 Environmental Questionnaire  | Mitigation Information Requirement                  |
|-----------------------|--|--|---|
| <b>Climate Change</b> | Climate Resilience: A description of design features, construction methods, and operation strategies that the applicant will employ to increase resilience from weather- and climate-related risks (e.g., increased flooding, wildfires) that may occur over the lifetime of the facility. | Indicate the impact that the project would have on greenhouse gas emissions and describe sustainability efforts to be incorporated into the project (i.e., renewable energy use) as well as any efforts to improve energy efficiency and to reduce emissions.<br><br>Also describe how climate resilience will be addressed; that is, how will the project adapt to impacts from climate change? | Description of resilience and adaptation strategies |

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| <b>Air Quality</b>                   |  | Indicate types and quantities of air emissions (including odors or nanoscale materials) that would be produced by the project facilities, and any measures you have identified that might mitigate these impacts.  | Measures to mitigate impacts   |
| <b>Water Quality</b>                 | Water: A description of the applicant's water conservation efforts, such as plans to fund water restoration projects, increase water reuse, and recycle rates year over year, and other progressive strategies to achieve more ambitious water conservation goals over time. | Describe surface and underground water resources at or near the project site; any impacts of the proposed project to these resources; and any measures that you have identified that might mitigate these impacts. Indicate the source, quality, and supply capacity of local domestic and industrial/commercial water resources, and the amount of water that project facilities are expected to utilize. Note whether the water that is being supplied is in compliance with the Safe Drinking Water Act, and if not, what steps are being taken to ensure compliance. Describe the wastewater treatment facilities available for processing the additional effluent from the project. | Water conservation efforts and other progressive strategies measures to mitigate impacts |
| <b>Human Health and Safety</b>       |  | Please identify and describe: (1) any known or potential health and safety hazards to the public or project workers that may result from or are associated with your proposed project; and (2) any efforts that would be taken to mitigate these hazards.  | Efforts that would be taken to mitigate health and safety hazards                        |
| <b>Hazardous and Toxic Materials</b> |  | Describe all toxic, hazardous, or radioactive substances that will be used or produced by the proposed project facilities.   |  |

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| <b>Hazardous Waste and Solid Waste Management</b> |   | Indicate the types and quantities of solid wastes the project facilities would produce.  |   |
| <b>Utilities</b>                                  | Energy: A description of how the applicant will use renewable energy to the maximum extent possible. Transitioning to a clean energy supply will bring down the long-term cost of operations as the cost of using renewable energy decreases. |  | How renewable energy will be used to the maximum extent   |
| <b>Environmental Justice</b>                      | Community and Environmental Justice Impacts: A description of the applicant's strategies for minimizing the potential for adverse impacts to the local community, including communities with environmental justice concerns.                  | Identify whether the proposed project would be in or near disadvantaged communities that are overburdened or underserved. Describe whether the proposed project may result in disproportionate and adverse human health or environmental impacts to overburdened and underserved communities, including minority, tribal, or low-income populations. | Strategies to minimize potential for adverse impacts Identify measures that might mitigate impacts. |
| <b>Socioeconomics</b>                             |   | In describing potential impacts, consider whether the proposed project will result in any changes in local socioeconomic conditions, including population, employment rates, cost of housing, and other relevant conditions. Identify any measures that you have identified that might mitigate these impacts.                                       | Measures that might mitigate impacts.   |

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| <p><b>Transparency</b></p> | <p>Sustainability Transparency: A description of the metrics and processes the applicant will use to measure, track, and report publicly on its climate and environmental responsibility goals and commitments.</p> | <p>Provide evidence of the community’s awareness of the project, such as newspaper articles or public notification and/or public meetings, as applicable. Identify state, tribal, or local government agencies that will have oversight or interest in the project, as well as any nongovernmental organizations that have expressed opposition or support for the project. Attach any project related correspondence with these agencies, tribes, and organizations. If a formal public hearing has been held by any government agency, attach any available minutes or notes from such hearings. Fully describe any public controversy or objections which have been made concerning this proposed project and discuss steps taken to resolve such objections.</p> | <p>Metrics and processes to measure, track, and report. Evidence of community’s awareness. Steps taken to resolve objections</p> |
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<sup>i</sup> Department of Commerce. Draft Programmatic Environmental Assessment for Modernization and Internal Expansion of Existing Semiconductor Fabrication Facilities under the CHIPS Incentives Program. December 2023. Available online:

<https://www.nist.gov/system/files/documents/2023/12/26/CHIPS%20Modernization%20Draft%20PEA.pdf>

<sup>ii</sup> U.S. Department of Labor (DOL), High Road to the Middle Class. <https://www.dol.gov/general/good-jobs/high-road-to-the-middle-class>

<sup>iii</sup> Department of Commerce. CHIPS for America Guide: Environmental Questionnaire. August 25, 2023. Available online:

<https://www.nist.gov/system/files/documents/2023/12/27/PRA%20Environmental%20Questionnaire-20230825v3.pdf>