



# BUILD AMERICA BUY AMERICA AND DOMESTIC CONTENT: A PRIMER FOR THE GREENHOUSE GAS REDUCTION FUND SOLAR FOR ALL PROGRAM

## IRA Explainers and Guides Series for States

Vero Bourg-Meyer<sup>1</sup> and Ayana Burrowes<sup>2</sup>

### Introduction

The Build America, Buy America (**BABA**) Act came into law in 2021 under the Infrastructure Investment and Jobs Act (**IJJA**), also commonly known as the Bipartisan Infrastructure Law (**BIL**).<sup>3</sup> BABA established a domestic content procurement preference for federal government procurement and various federal-aid infrastructure projects after May 14, 2022.<sup>4</sup> In addition, in 2022, the Inflation Reduction Act (**IRA**) established a domestic content bonus credit program for energy projects that use a specified percentage of domestically produced steel, iron, or manufactured products (the **Domestic Content Bonus Credit**).<sup>5</sup>

This explainer is in the form of questions and answers. It provides a plain English overview of BABA and how it compares with the requirements of the Domestic Content Bonus Credit program. It was specifically prepared for the agencies and organizations that will implement the Greenhouse Gas Reduction Fund (**GGRF**) Solar for All (**SFA**) program, but many other stakeholders will find the information to be broadly applicable. The SFA program is expected to deploy four GW of distributed solar energy entirely for low-income and disadvantaged communities, a large portion of which must meet BABA requirements. EPA obligated the seven billion dollars of SFA funding to 60 awardees in August 2024.<sup>6</sup>

---

<sup>1</sup> CESA Senior Project Director for Solar and Offshore Wind – [vero@cleanegroup.org](mailto:vero@cleanegroup.org)

<sup>2</sup> CESA Summer Research Fellow

<sup>3</sup> Division G, Title IX of the Infrastructure Investment and Jobs Act, [Public Law 117–58](#), Secs. 70901–27, codified at 41 U.S.C. Ch. 83

<sup>4</sup> Id. Sec. 70914(a). The Buy America Preference takes full force and effect on May 14, 2022, which is 180 days after the enactment of IJJA on November 15, 2021.

<sup>5</sup> [Public Law 117-169](#), 136 Stat. 1988, codified at [26 U.S.C. § 48\(a\)\(12\)](#) and seq.

<sup>6</sup> Note that this funding, while obligated, is not yet available to programs. Please refer to CESA's [Solar for All Briefing for Community-Based Organizations](#) for a timeline for funding deployment.

This explainer is based on publicly available information from federal agencies, information communicated by federal agencies to SFA awardees, information gathered by CESA from federal agencies, as well as other trusted sources. Should you find incorrect information in this explainer, please contact the lead author.

**This explainer does not constitute legal advice, and you should not make any investment decisions based on the information contained in it. Readers seeking to develop projects should seek the advice of qualified tax attorneys and accountants, as relevant.**

In addition to the statutory provisions of IIJA and IRA referred to above, readers should also be aware of the following:

1. After passage of BABA, in 2022, the White House’s Office of Management and Budget (OMB) drafted a memo, referred to as [M-22-11](#), with some guidance for heads of agencies.
2. OMB further issued a final rule, [88 FR 57787](#), revising OMB’s then existing Guidance for Grants and Agreements. The new rules became effective on October 23, 2023 and are codified at [2 CFR Part 184](#) and [2 CFR 200.322](#). These rules include further details on how to implement BABA.
3. On October 25, 2023, OMB issued a memo, referred to as [M-24-02](#), for heads of federal agencies to offer further guidance on how to apply BABA and the updated regulations above. This memo replaces the M-22-11 above,<sup>7</sup> and provides information about the Buy America Preference (as defined below) and the waiver process

In case of conflict between 2 and 3 above, the regulations in 2 prevail.

OMB further revised the guidance, now called the “OMB Guidance for Federal Financial Assistance” in [89 FR 30136](#), which will become effective on October 1, 2024.

## About CESA

The Clean Energy States Alliance (CESA) is a national, nonprofit coalition of public agencies and organizations working together to advance clean energy. CESA members—mostly state agencies—include many of the most innovative, successful, and influential public funders of clean energy initiatives in the country.

CESA works with state leaders, federal agencies, and other stakeholders to develop and promote clean energy programs and markets, with an emphasis on renewable energy, energy equity, financing strategies, and economic development. CESA facilitates information sharing, provides technical assistance, coordinates multi-state collaborative projects, and communicates the views and achievements of its members.

For more information about CESA’s work on Solar for All, see:

<https://www.cesa.org/projects/scaling-up-solar-for-under-resourced-communities/solar-for-all/>

---

<sup>7</sup> Note that in a few restricted cases listed at [2 CFR 184.2\(b\)](#) and that do not include any Solar for All projects, OMB Memorandum M-22-11 will still be applicable.

## Table of Contents

<b>1. Build America, Buy America Basics .....</b>	<b>5</b>
a) <i>What Is the Build America, Buy America Act?.....</i>	<i>5</i>
b) <i>Does BABA Apply to the Solar for All Program? .....</i>	<i>5</i>
c) <i>Does the Buy America Preference Apply to Solar for All Projects? .....</i>	<i>5</i>
d) <i>Are the Buy American Act and BABA the Same? .....</i>	<i>6</i>
<b>2. Buy America Preference General Applicability .....</b>	<b>6</b>
a) <i>What Does the Buy America Preference Generally Apply to? .....</i>	<i>6</i>
b) <i>What Is “Federal Financial Assistance”?.....</i>	<i>6</i>
c) <i>What Is Considered Infrastructure for Purposes of BABA?.....</i>	<i>7</i>
d) <i>Do Federal Agencies Have Some Latitude in Interpreting What Is Considered Infrastructure for BABA? .....</i>	<i>7</i>
i. <i>What Is <b>Private</b> Infrastructure <b>Not Subject</b> to the Buy America Preference in Solar For All?.....</i>	<i>7</i>
ii. <i>What Is <b>Public</b> Infrastructure <b>Subject</b> to the Buy America Preference in Solar For All? .....</i>	<i>8</i>
e) <i>Is the Buy America Preference Applicable to Financial Products under SFA?.....</i>	<i>10</i>
f) <i>Is the Buy America Preference Applicable to All Financial Products/Financial Assistance under SFA? ... ..</i>	<i>10</i>
<b>3. BABA’s Project Level Application .....</b>	<b>10</b>
a) <i>What Items Does the Buy America Preference Apply to?.....</i>	<i>10</i>
b) <i>What if a Project Only Receives Some Federal Funding?.....</i>	<i>11</i>
c) <i>What Are the Requirements of the Buy America Preference? .....</i>	<i>11</i>
d) <i>What Is Considered “Produced in the United States” under BABA? .....</i>	<i>11</i>
e) <i>How to Distinguish Between Iron/Steel/Construction Materials vs. Manufactured Products in a Solar for All Project? .....</i>	<i>12</i>
f) <i>What Counts as Costs to Calculate Compliance with the 55% Rule?.....</i>	<i>13</i>
g) <i>Who Does BABA Impact? .....</i>	<i>14</i>
h) <i>Is it True that BABA Does not Apply to For-Profit Entities?.....</i>	<i>15</i>
i) <i>What Do Funding Recipients Need to Do to Show Compliance? .....</i>	<i>15</i>
j) <i>How Will the Cost of BABA Compliance Impact SFA Budgets? .....</i>	<i>16</i>
k) <i>Where to Find Information About US-Based Solar Manufacturers? .....</i>	<i>17</i>
<b>4. Waivers and Exemptions .....</b>	<b>17</b>
a) <i>Can EPA Issue Waivers? .....</i>	<i>17</i>
b) <i>Can EPA Completely Waive BABA for Solar for All? .....</i>	<i>18</i>

- c) *What Kind of Waivers Exist?* ..... 18
- d) *What Is a General Applicability Waiver?* ..... 18
- e) *What Kinds of General Applicability Public Interest Waiver Can EPA Issue and Which Has EPA Already Issued?* ..... 19
- f) *Is the Small Projects General Applicability Waiver Relevant for Solar for All?* ..... 21
- g) *Where May I Find Information About Existing Waivers?* ..... 21
- h) *Can EPA Issue Waivers even after GGRF Awards Are Made?* ..... 21
- i) *Are Waivers Retroactive?* ..... 22
- j) *Who Can Offer Waivers for Projects Receiving Funding from Multiple Agencies?* ..... 22
- k) *What Is the Process for a Waiver to be Approved?* ..... 22
- l) *What New Tariffs Could Apply to Imported Products for SFA Projects?* ..... 22
- 5. Domestic Content Bonus Credit Basics ..... 22**
  - a) *What is the Domestic Content Bonus Credit?* ..... 22
  - b) *What Does “Produced in the U.S.” Mean for the Domestic Content Bonus Credit?* ..... 23
  - c) *How Does One Calculate Compliance with the Adjusted Percentage Rule?* ..... 24
  - d) *Are the Buy America Preference and the Domestic Content Bonus Credit Requirements the Same?..* 26
- 6. Comparison Table – Cheat Sheet..... 28**

## 1. Build America, Buy America Basics

### a) What Is the Build America, Buy America Act?

The Build America, Buy America (**BABA**) Act came into law on November 15, 2021, under the Infrastructure Investment and Jobs Act (**IIJA**).<sup>8</sup>

It established a “domestic content procurement preference,” also called “**Buy America Preference**,” which is applicable to “all Federal Government procurement and to various Federal-aid infrastructure programs”<sup>9</sup> after May 14, 2022. Before BABA, some domestic content preferences existed for federal procurement, but they were narrower in scope.<sup>10</sup>

Under BABA’s Buy America Preference, federal agencies must now ensure that all iron, steel, manufactured products, and construction materials incorporated into infrastructure projects funded through “a Federal financial assistance program for infrastructure” are produced in the United States.<sup>11</sup>

The stated rationale for BABA was that taxpayers “expect that their public works infrastructure will be produced in the United States by American workers” and that United States taxpayer dollars invested in public infrastructure “should not be used to reward companies that have moved their operations, investment dollars, and jobs to foreign countries or foreign factories, particularly those that do not share or openly flout the commitments of the United States to environmental, worker, and workplace safety protections.”<sup>12</sup> BABA is intended to result in a more resilient domestic supply chain and manufacturing supply for critical materials.

### b) Does BABA Apply to the Solar for All Program?

Yes. BABA applies to all federal agencies providing federal financial assistance, and thus applies to the Greenhouse Gas Reduction Fund (**GGRF**) programs administered by the U.S. Environmental Protection Agency (**EPA**), including the Solar for All (**SFA**) program.<sup>13</sup>

### c) Does the Buy America Preference Apply to Solar for All Projects?

It depends. Not all projects funded with SFA funds will trigger compliance requirements relating to the Buy America Preference. For additional information about which projects are considered “infrastructure” and subject to the Buy America Preference, see below in Section 2.c) (*What Is Considered Infrastructure for Purposes of BABA?*).

---

<sup>8</sup> [Public Law 117–58](#), Secs. 70901–27

<sup>9</sup> Id. Sec. 70911(12)

<sup>10</sup> For example, see the domestic preference requirements listed under [Public Law 117–58](#), Sec. 70913(b)(2).

<sup>11</sup> Id. Sec. 70914(a)

<sup>12</sup> Id. Secs. 70911(2) and 70911(3)

<sup>13</sup> See Section VI.B: Administrative and National Policy Requirements of the Solar for All Notice of Funding Opportunity and EPA’s Solar for All FAQ webpage [here](#).

Even in cases where projects are subject to the Buy America Preference, heads of federal agencies may waive its application under certain circumstances.<sup>14</sup> See below in Section 4 (*Waivers and Exemptions*) for additional information about waivers.

Note that as per [2 CFR 184.4\(b\)](#), “all Federal awards with infrastructure projects must include the Buy America Preference in the terms and conditions,” and in the flow down requirements for subawards and other contracts. EPA intends to issue additional guidance on how BABA applies to SFA no later than the obligation date for the SFA program, and has already answered some questions related to BABA in its FAQs for SFA awardees.

#### d) Are the Buy American Act and BABA the Same?

No. The Buy American Act is codified in [41 U.S. Code §§ 8301–8305](#). It applies to direct federal procurement, e.g., EPA’s own contracts for construction, and does not apply to financial assistance. The requirements are also slightly different.<sup>15</sup> Critically, unlike the Buy America Act, BABA does not include exceptions for sourcing products from trade allies under the Trade Agreements Act of 1979.<sup>16</sup> SFA awardees should make clear to their partners, coalition members, and other suppliers, which standard is being applied. Note that some states have entered into international trade agreements directly or opted into international trade agreements. As per the Made In America Office, “agencies may propose waivers in the public interest to allow State entities to comply with their international trade obligations.”<sup>17</sup>

## 2. Buy America Preference General Applicability

#### a) What Does the Buy America Preference Generally Apply to?

Under BABA, the Buy America Preference is applicable to “infrastructure projects” that receive funding through a “program for Federal financial assistance.”<sup>18</sup> The Buy America Preference is applicable to “infrastructure projects in the United States, regardless of whether infrastructure is the primary purpose of the Federal award.”<sup>19</sup>

SFA funding used for expenditures not relating to “infrastructure” as defined here are therefore not subject to the Buy America Preference.

#### b) What Is “Federal Financial Assistance”?

IIJA adopts the definition of “Federal financial assistance” established under [2 CFR 200.1](#) as “assistance that non-Federal entities receive or administer in the form of: grants (...)” among others. IIJA also statutorily includes “all expenditures by a federal agency to a non-Federal entity

---

<sup>14</sup> Supra note 812, Sec. 70914(b)

<sup>15</sup> See below in Section 3(i) (*What Do Funding Recipients Need to Do to Show Compliance?*) for additional information.

<sup>16</sup> See [The Buy American Act and Other Federal Procurement Domestic Content Restrictions](#), Congressional Research Service, for additional information about BAA.

<sup>17</sup> [Buy American \(BAA\) or Buy America Factsheet](#), Made In America Office, accessed August 22, 2024

<sup>18</sup> Id. Sec. 70914(a)

<sup>19</sup> See [2 CFR 184.4\(a\)](#). Note that there are [exceptions](#) pertaining to disaster and emergency spending.

for an infrastructure project.”<sup>20</sup> Solar for All funds will be awarded to states and other eligible recipients in the form of grants and are thus generally considered “Federal financial assistance.”

### c) What Is Considered Infrastructure for Purposes of BABA?

Under [2 CFR 184.3](#), “infrastructure” 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.” Federal regulations further specify that the term infrastructure encompasses “public infrastructure,” and list “structures, facilities, and equipment that generate, transport, and distribute energy including electric vehicle charging.”<sup>21</sup> **Particularly, EPA considers residential-serving community solar projects to fall within the ambit of this definition and to be “public infrastructure” that must comply with the Buy America Preference.**<sup>22</sup>

### d) Do Federal Agencies Have Some Latitude in Interpreting What Is Considered Infrastructure for BABA?

Yes. While regulations require federal agencies to interpret “infrastructure” broadly,<sup>23</sup> they also set out a “public function test” to determine whether a project not listed in the regulations constitutes “infrastructure.”

To determine what is or is not infrastructure for BABA, an agency must consider whether a project is “publicly owned and operated, privately operated on behalf of the public, or is a place of public accommodation, as opposed to a project that is privately owned and not open to the public.”<sup>24</sup>

OMB, in [M-24-02](#), noted that “projects with the former ‘public’ qualities have greater indicia (or distinguishing features) of ‘infrastructure,’ while projects with the latter ‘private’ quality have fewer. As a result, projects consisting solely of the purchase, construction, or improvement of a private home for personal use, for example, would not constitute a public infrastructure project for purposes of BABA.”<sup>25</sup>

#### i. What Is **Private** Infrastructure **Not Subject** to the Buy America Preference in Solar For All?

In keeping with the White House interpretation in [M-24-02](#), EPA indicated that it would indeed utilize this test to determine whether projects should be considered “public infrastructure” so **that projects serving privately owned single-family and multi-family homes “that are not subsidized by public bodies will not be subject to BABA.”**<sup>26</sup> This is relevant for SFA infrastructure, superstructure, and equipment, such as rooftop solar, enabling upgrades, energy efficiency upgrades, and private EV charging stations among others.

---

<sup>20</sup> Supra note 14, Sec. 70912(4)(B)

<sup>21</sup> See [2 CFR 184.4\(c\)](#).

<sup>22</sup> Frequently Asked Questions and Answers: EPA Solar for All, pg.15, version accessed July 1, 2024

<sup>23</sup> See [2 CFR 184.4\(d\)](#).

<sup>24</sup> Ibid.

<sup>25</sup> See [M-24-02](#), pg. 3.

<sup>26</sup> Supra note 22

## ii. What Is **Public Infrastructure Subject** to the Buy America Preference in Solar For All?

Based on the principles above and EPA’s guidance, it appears that there are three broad categories of SFA projects that may be qualified as “public infrastructure” and require compliance with the Buy America Preference, as follows:

- **Always public.** These projects are those listed at [2 CFR 184.4\(c\)](#). EPA considers community solar to be within this category of public infrastructure.<sup>27</sup>
- **Always public because they squarely meet the public function test.** Solar projects that serve a “public function” including certain residential solar projects, will be considered public infrastructure and subject to the Buy America Preference unless they obtain a waiver. In consequence, EPA stated, the Buy America Preference applies to SFA projects serving:
  - **Publicly accessible areas** such as “community centers, roadways, and EV charging stations on multi-family properties;”<sup>28</sup>
  - **Privately owned commercial buildings that meet the public function test** such as “an inn, hotel, motel; other establishment which provides lodging to transient guests; restaurant, cafeteria, lunchroom, lunch counter, soda fountain, or other facility principally engaged in selling food for consumption on the premises, including, but not limited to, any such facility located on the premises of any retail establishment; or any gasoline station; or motion picture house, theater, concert hall, sports arena, stadium or other place of exhibition or entertainment (based on Civil Rights Act definition of public accommodation);”<sup>29</sup>
  - **Privately owned mixed use properties if the SFA project benefits the parts that meet the “public function” test** within the property. “For example, if a mixed-use property has one common HVAC system and the property is upgrading that HVAC system primarily to benefit the restaurant tenant on the ground floor that is open to the public, the principal purpose of that project would be infrastructure and the project would be subject to BABA.”<sup>30</sup>
- **Sometimes public because they may meet the public function test.** This category includes projects that do not clearly fit into one of the categories above. For these projects, EPA will make determinations on a case-by-case basis. EPA stated that publicly owned or publicly supported/subsidized multifamily properties “should be elevated to EPA for a case-specific review.”<sup>31</sup>

The table below, communicated by EPA to Solar for All selectees on June 27, 2024, provides “an illustrative non-exhaustive” list of BABA applicability to projects.

---

<sup>27</sup> See c) (*What Is Considered Infrastructure for Purposes of BABA?*) above.

<sup>28</sup> Id.

<sup>29</sup> Id.

<sup>30</sup> Id.

<sup>31</sup> Id.



Project Category	Buy America Preference Applicability
Residential-serving community solar	Yes
Publicly accessible EV charging stations	Yes
Publicly accessible community centers and roadways on multi-family properties	Yes
Privately owned retail establishments	Yes, if public accommodation
Privately owned energy generation and / or storage facilities	Yes, if they serve a public function
Publicly owned energy generation and/or storage transportation facilities	Yes
Publicly owned transportation facilities (e.g., bus depot)	Yes
Privately owned transportation facilities	Yes, if they serve a public function
Publicly owned vehicles	Case specific
Privately owned vehicles for private use	No
Single family homes (private residences for personal use)	No
Privately owned multi-family homes or mixed-use property: <ul style="list-style-type: none"> <li>Publicly accessible community center, roadway, or EV charging station</li> </ul>	Yes
Mixed-use property: <ul style="list-style-type: none"> <li>Project primarily serves non-residential portion of multifamily property that meets public function test (e.g., commercial with public access)</li> </ul>	Yes
Privately owned multi-family homes (unsubsidized by government funding source) <ul style="list-style-type: none"> <li>Not mixed-use</li> <li>Not a publicly accessible community center, roadway, or EV charging station</li> </ul>	No
Privately owned multi-family homes (unsubsidized by government funding source) <ul style="list-style-type: none"> <li>Mixed-use (project may benefit both private housing units and commercial tenants in same property)</li> <li>Not a publicly accessible community center, roadway, or EV charging station</li> </ul>	Case specific
Privately owned manufacturing or industrial facilities	No
Privately owned offices	No
EV charging stations installed at private homes, including multi-family homes (no public access)	No
EV charging stations installed at privately-owned manufacturing or industrial facilities	No, unless publicly accessible

Project Category	Buy America Preference Applicability
EV charging stations installed at privately-owned office buildings	Case specific

Table 1: Illustrative non-exhaustive list of BABA applicability to SFA projects – Source: EPA

### e) Is the Buy America Preference Applicable to Financial Products under SFA?

Yes.

### f) Is the Buy America Preference Applicable to All Financial Products/Financial Assistance under SFA?

No, but it is applicable to most of them. As per EPA, the Buy America Preference applies to forms of financial assistance funding projects that are (a) specific and (b) completed **after** the date of award obligation.<sup>32</sup>

EPA, in a communication to SFA selectees dated June 27, 2024, indicated the following.

- **Subject to BABA.** In the SFA program, the following are subject to BABA requirements:
  - Direct loan or loan guarantee for infrastructure project
  - Loan participation / syndicated agreement for infrastructure project
  - Rebates for infrastructure projects
  - Interest rate buydowns or refinancings of infrastructure loans, where construction is completed **after** the award obligation<sup>33</sup>
  - Subsidies for subscriptions to community solar assets where construction is completed **after** the award obligation
- **Not subject to BABA.** In the SFA program, the following are not subject to BABA requirements:
  - Interest rate buydowns or refinancings of infrastructure loans, where construction is completed **prior to** the award obligation
  - “Loan loss reserves or loan guarantees for pools of third-party lenders or financial assistance providers (where there is no direct link to specific infrastructure projects)”
  - Subsidies for subscriptions to community solar assets where construction is completed **before** the award obligation

## 3. BABA’s Project Level Application

### a) What Items Does the Buy America Preference Apply to?

The Buy America Preference applies only to items “consumed in, incorporated into, or affixed to an infrastructure project,”<sup>34</sup> so that temporary products/materials and equipment and furnishing (e.g.,

<sup>32</sup> *Frequently Asked Questions and Answers: EPA Solar for All*, Sec. 4u, EPA, pg. 17, version accessed July 1, 2024

<sup>33</sup> This is the case regardless of whether the interest rate buydown or refinancing occurs before or after construction.

<sup>34</sup> See [M-24-02](#), pg. 15 and [EPA’s 2022 Build America, Buy America Act Domestic Preference Overview](#).

scaffolding, chairs, desks, portable computers etc.) do not have to be “produced in the United States.”

### b) What if a Project Only Receives Some Federal Funding?

Where applicable, the Buy America Preference will apply to the entire infrastructure project (subject to other exclusions for instance for non-infrastructure expenditures or temporary materials) regardless of how much or how little federal assistance funding is used.<sup>35</sup>

### c) What Are the Requirements of the Buy America Preference?

The Buy America Preference requires that, for infrastructure projects subject to the preference: (a) all **iron and steel**; (b) the **manufactured products**; and (c) the **construction materials**; be “produced in the United States.”

Construction materials do not include cement or cement-like products like aggregates.<sup>36</sup>

### d) What Is Considered “Produced in the United States” under BABA?

Different rules apply to different parts of an infrastructure project. For manufactured products, a more complicated analysis is required to determine whether it is “produced in the United States.” [2 CFR 184.3](#) defines what “produced in the United States” means as follows:

- **Iron, steel, and construction materials.** All manufacturing processes for iron, steel, and construction materials must have occurred in the United States.
  - For iron and steel, this means all activities “from the initial melting stage through the application of coatings.”<sup>37</sup>
  - For other construction materials, [2 CFR 184.6](#) defines manufacturing processes for distinct categories, including, among others, non-ferrous metals, plastic and polymer-based products, glass, and other materials. A variety of non-ferrous metals are used in solar projects such as copper, zinc, aluminum, or silver.<sup>38</sup>
- **Manufactured products.** All manufactured products (a) must have been manufactured in the United States **and** (b) “the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard that meets or exceeds this standard has been established under applicable law or regulation (...).” There is no further information about the meaning of the term “manufactured in the United States” in the Code of Federal Regulations. Based on the definition of “manufacturer” and of “manufactured products,” we understand it to mean the final step of the manufacturing process, but this has not been confirmed by agencies.

**In practice, the first thing a project developer or a program administrator must then do to understand how to meet the Buy America Preference is to determine which parts of its infrastructure are manufactured products and which are not.**

---

<sup>35</sup> See [M-24-02](#), pgs. 4 and 5.

<sup>36</sup> Supra note 14, Sec. 70917(c)

<sup>37</sup> [2 CFR 184.3](#)

<sup>38</sup> [A Guide to Metals for Solar Suppliers](#), Kloeckner Metals Corporation, Webpage accessed August 20, 2024

## e) How to Distinguish Between Iron/Steel/Construction Materials vs. Manufactured Products in a Solar for All Project?

Federal regulations state that an item is not a manufactured product if it meets the definition of an iron or steel product, a construction material, or a “section 70917(c) material,” which is essentially a cement or cement-like material. If an item is iron, steel, or construction-like material, then it is not a manufactured product.<sup>39</sup> Iron and steel products are “wholly or predominantly” made of iron and/or steel,<sup>40</sup> which means that the costs of these products’ iron and steel content represents over half of the costs of all of their components.<sup>41</sup> BABA does not require that steel or iron be functionally structural.

Manufactured products are defined as “articles, materials, or supplies that have been combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies.”

The determination of whether an item is iron, steel, manufactured product, or construction materials must be decided “based on its status at the time it is brought to the work site for incorporation into an infrastructure project.”<sup>42</sup>

To our knowledge, EPA has not released guidance to clarify which parts of a solar project will usually be considered iron, steel, construction material or a manufactured product. Note that EPA’s past practice with respect to Made in America Laws has been to publish lists of products such as [this overview and products list](#). This list relates to the American Iron and Steel (AIS) provisions requiring Clean Water State Revolving Fund and Drinking Water State Revolving Fund assistance recipients to use iron and steel products that are produced in the United States. We caution users not to use this list for BABA and SFA purposes as the definitions and standards of AIS and BABA are different, but it is a useful point of reference to anticipate EPA’s behavior.

Further, we find it useful to look at how another part of the federal government, the Internal Revenue Service (IRS), has evaluated a similar question in a different context with respect to solar infrastructure. Beware that EPA has not indicated it would follow the same classification, and the definitions are slightly different with respect to steel and iron; e.g., IRS rules require that steel and iron be structural in function.<sup>43</sup> The IRS released a table classifying various parts of solar projects and storage projects as manufactured products, vs. steel and iron in the context of the Domestic Content Adder.<sup>44</sup> It is reproduced in part below. **Under the IRS classification, PV modules, trackers, battery packs, battery housing, and inverters are all considered manufactured products.**

---

<sup>39</sup> [2 CFR 184.3 “Manufactured products”](#)

<sup>40</sup> [2 CFR 184.3 “Iron or steel products”](#)

<sup>41</sup> [2 CFR 184.3 “Predominantly of iron or steel or a combination of both”](#)

<sup>42</sup> [2 CFR 184.4\(e\)\(2\)](#)

<sup>43</sup> See page 8 of [Notice 2023-38](#)

<sup>44</sup> Section 3.04 of [Notice 2023-38](#) provides a “non-exclusive safe harbor in Table 2 that taxpayers may rely on for the classification of certain Applicable Project Components as steel, iron, or Manufactured Products.” See [Domestic Content Bonus Credit Guidance under Sections 45, 45Y, 48, and 48E](#), Table 2 – Categorization of Applicable Project Components, pg. 14, Internal Revenue Service, 2023, as modified by Section 3.02 of [Notice 2024-41](#) to replace “utility scale” with “ground-mount and rooftop.”

Applicable Project	Applicable Project Component	Categorization
Ground-mount and rooftop <sup>45</sup> photovoltaic system	Steel photovoltaic module racking	Steel/Iron
	Pile or ground screw	Steel/Iron
	Steel or iron rebar in foundation (e.g., concrete pad)	Steel/Iron
	Photovoltaic tracker	Manufactured Product
	Photovoltaic module (which includes the following Manufactured Product Components, if applicable: photovoltaic cells, mounting frame or backrail, glass, encapsulant, backsheet, junction box (including pigtails and connectors), edge seals, pottants, adhesives, bus ribbons, and bypass diodes)	Manufactured Product
Battery energy storage technology	Inverter	Manufactured Product
	Steel or iron rebar in foundation (e.g., concrete pad)	Steel/Iron
	Battery pack (which includes the following Manufactured Product Components, if applicable: cells, packaging, thermal management system, and battery management system)	Manufactured Product
	Battery container/housing	Manufactured Product
	Inverter	Manufactured Product

Table 2: Categorization table of manufactured products vs. iron/steel for the Domestic Content Bonus Credit – Source: IRS

## f) What Counts as Costs to Calculate Compliance with the 55% Rule?

Once an SFA awardee understands what qualifies as a manufactured product and what does not within its infrastructure project, it is able to apply the Buy America Preference.

For manufactured products, the recipient must, in addition to verifying that the product is “manufactured” in the US, verify whether the product complies with the 55% cost rule mentioned above<sup>46</sup> so that:

$$\frac{\text{Costs of US mined, produced, or manufactured components in US\$}}{\text{Costs of All Components in US\$}} > 0.55$$

Which costs are included in the calculation above depends on whether the components are purchased or manufactured by the manufacturer.<sup>47</sup>

<sup>45</sup> Note that as stated above, the notice in which the table originally appeared included only “utility scale projects” but a later rule, Notice 2024-41, replaced “utility scale” with “ground-mount and rooftop.”

<sup>46</sup> [2 CFR 184.3 “Produced in the United States”](#)

<sup>47</sup> [2 CFR 184.5](#)

- **For components purchased by the manufacturer:** “The acquisition cost, including transportation costs to the place of incorporation into the manufactured product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued)”
- **For components manufactured by the manufacturer:** “All costs associated with the manufacture of the component, including transportation costs as described [above], plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the manufactured product.”

**We have not, so far, found any useful examples of such calculations in practice.** Agencies have existing examples of compliance calculations with the Buy American Act<sup>48</sup> but not of compliance with BABA. The language above is not utterly clear. Our understanding, based on conversations with agencies, is that labor costs associated with the manufacturing process may be excluded, although this is not confirmed from any official source.

The White House office in charge of these topics, the Made in America Office (MIAO) housed at OMB, referred us to these [FAQs](#), including the following steps: “ 1. Determine the components manufactured in the United States. 2. Determine the cost of those components manufactured in the United States. 3. Determine the cost of all components. 4. Divide the cost determined in step 2 by the cost determined in step 3. If the fraction is more than 55 percent, the manufactured product complies with the Buy America requirements as long as the manufactured product is, itself, manufactured in the United States.”

**Based on the on the regulatory language, MIAO’s stepped calculation process above, and conversations with DOE, we expect that the 55% test above will have to be met for each manufactured product rather than at the project level.** This will make delineating what is or is not a manufactured product all the more important.

### g) Who Does BABA Impact?

**In short, the requirement follows the federal funding, so that all entities that access the funding for covered infrastructure must comply.**

To elaborate, the requirement applies to “non-federal entity” prime recipients. This means that federal agencies must include a Buy America Preference in the terms and conditions for grants offered to recipients that are states, local governments, Indian tribes,<sup>49</sup> territories, institutions of higher education, and non-profit organizations.<sup>50</sup>

---

<sup>48</sup> See page 38 and seq., for example, of [Conducting Pre-Award and Post-Delivery Audits for Rolling Stock Procurements Best Practices Handbook for Recipients, Auditors, Manufacturers, and Suppliers](#), Federal Transit Administration, 2017.

<sup>49</sup> Note that as per the M22-11 Notice, pg. 3, and confirmed in M-24-02: “Before applying a Buy America preference to a covered program that will affect Tribal communities, Federal agencies should follow the consultation policies established through Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, and consistent with policies set forth in the Presidential Memorandum of January 26, 2021, on Tribal Consultation and Strengthening Nation-Nation Relationships. Federal agencies should commence consultation promptly.”

<sup>50</sup> [2 CFR 200.1 “Non-Federal entity \(NFE\)”](#)

The Buy America Preference also applies to all subrecipients, e.g., Solar for All coalition members, as regulations impose flow-down requirements of terms and conditions, unless the terms and conditions themselves specifically indicate otherwise.<sup>51</sup>

Further, the Buy America Preference “must be included in all subawards, contracts, and purchase orders for the work performed, or products supplied under the Federal award”<sup>52</sup> so that the preference would apply to infrastructure funded via the subrecipients as detailed above in Section 2(c) (*What Is Considered Infrastructure for Purposes of BABA?*) above.

### h) Is it True that BABA Does not Apply to For-Profit Entities?

No, that is an oversimplification. It is true that as per the final guidance [M-24-02](#), OMB does not require that federal agencies impose the Buy America Preference on for-profit entities that are prime recipients. However, (a) none of the GGRF prime recipients are for-profit entities and (b) the preference remains applicable to for-profit entities that are sub-recipients or sub-awardees of awards that contain the Buy America Preference, such as the Solar for All awards, through flow-down requirements imposed in subawards.<sup>53</sup> For example, OMB specifies, “if a Federal agency obligates an award to a State government as a direct recipient, and the State issues a subaward to a for-profit entity to carry out the project as a subrecipient, then the Buy America preference requirements included in the Federal award would flow down to the for-profit entity.”<sup>54</sup>

### i) What Do Funding Recipients Need to Do to Show Compliance?

It is unclear how recipients are to show compliance for GGRF programs. We have not been able to find a clear answer in the Code of Federal Regulations, EPA’s General Terms and Conditions, SFA’s Specific Terms and Conditions, nor EPA’s webpage on BABA. We anticipate that EPA will provide additional information about this topic at some point.

However, EPA’s Office of Land and Emergency Management (**OLEM**) offers some elements of an answer in its 2023 [Frequently Asked Questions](#), which include very useful information about how to ensure compliance under an EPA process. We emphasize once more that EPA will likely issue guidance specific to GGRF programs as OLEM’s process does not apply to programs under the Clean Air Act such as GGRF programs.

Under OLEM’s process, recipients must ensure that products delivered to a construction site are accompanied by “proper documentation that demonstrate[s] compliance with the law and [is] made available to [EPA] upon request.”<sup>55</sup> OLEM recommends using a signed certification letter, but offers other options and does not require a specified format for tracking and documenting

---

<sup>51</sup> Generally as per [2 CFR 200.101\(b\)\(2\)](#) and specifically relating to BABA as per [2 CFR 184.4\(b\)](#)

<sup>52</sup> Id. In addition, [2 CFR 200.322](#) specifies similar flow down requirements for procurements. See a list of contract provisions to be included by recipients in contracts provided in [Appendix II to Part 200, Title 2](#).

<sup>53</sup> See [M-24-02](#), pgs. 4 and 5.

<sup>54</sup> Id.

<sup>55</sup> [Frequently Asked Questions - Office of Land and Emergency Management - Build America, Buy America Act](#), EPA, pg. 22

compliance.<sup>56</sup> While manufacturers, suppliers, and distributors are responsible to provide “adequate and accurate documentation of the products manufactured,” recipients are “primarily responsible” to ensure that the documentation is “sufficient to document compliance (...).”<sup>57</sup>

DOE’s process is similar, where “prime recipients must maintain certifications or equivalent documentation for proof of compliance that those articles, materials, and supplies (...) are produced in the United States. The certification or proof of compliance must be provided by the suppliers or manufacturers (...) and flow up from all sub-awardees, contractors and vendors to the prime recipient. Prime recipients must keep these certifications with the award/project files and be able to produce them upon request from DOE, auditors or Office of Inspector General.”<sup>58</sup> In addition, DOE requires, for their compliance process, that recipients “certify or provide equivalent documentation for proof of compliance that a good faith effort was made to solicit bids for domestic products used the infrastructure project under this award.”<sup>59</sup>

**Of note for SFA awardees, a manufacturer claiming to comply with the Buy American Act<sup>60</sup> is not automatically considered to comply with BABA.<sup>61</sup>**

## j) How Will the Cost of BABA Compliance Impact SFA Budgets?

Because BABA is relatively new, its effect on projects has not been thoroughly studied. We have not found good sources of information for the “cost delta” between a non-compliant and a compliant project, which is necessary information to produce a realistic updated budget to submit to EPA. This is in part because BABA is new, and in part because information about costs is not readily available from manufacturers and developers as manufacturers have no incentive to disclose them. This prompted Treasury to change the way that agency approaches calculating compliance with the Domestic Content Bonus Credit program (see below).

However, we have collected a few anecdotal data points from developers, all based on “educated guesses” or “back of the envelope” calculations due to the limited supply available, as follows:

---

<sup>56</sup> See [Frequently Asked Questions - Office of Land and Emergency Management - Build America, Buy America Act](#), EPA, pg. 22, for additional details about ways to show compliance under EPA OLEM’s process.

<sup>57</sup> *Id.*, pgs. 21-25

<sup>58</sup> [Build America Buy America Office of Management webpage](#), DOE, accessed July 29, 2024. Also see [Implementation of the Buy America Requirement for Infrastructure Projects](#), DOE, for additional information about DOE’s process.

<sup>59</sup> *Id.*

<sup>60</sup> The Buy American Act is a 1978 law that restricts the purchase of non-domestic supplies in federal government contracts for products used in the U.S. It is codified in in [41 U.S.C. §§ 8301–8305](#). It applies to direct federal procurement, i.e., goods that the federal government buys for its own use, rather than federal financial assistance contracts and grants. Among other things, it includes a different percentage cost threshold to demonstrate compliance with manufactured goods and includes a percentage cost threshold for iron and steel as well (95%). See [Buy American or Buy America, Made In America Office](#), for a detailed comparison of BABA (and other “Buy America laws”) with the Buy American Act.

<sup>61</sup> [Frequently Asked Questions - Office of Land and Emergency Management - Build America, Buy America Act](#), EPA, pg. 23



- A small developer focused on mid-size installations for affordable housing providers proposed \$0.15 to \$0.30 per Watt as a cost adder, depending on the project baseline and tariffs.
- A very large national residential developer proposed that the cost delta would be about \$0.20 per Watt.
- A developer noted that domestic racking would likely be available at a nominal cost difference.

Everyone consulted noted that it would be very challenging to meet this standard in the short term, and that no domestically produced inverters are available at this time. One developer stated that it would not be feasible for the industry to meet the standard until the second part of 2025 or early 2026, even if the reshoring of American manufacturing promised by the IRA materializes.

In addition, awardees should consider the time needed for products to be available after a plant has started operating, as well as the availability for purchase of the systems that will be produced as many plants will have reserved their production for large buyers, e.g., corporate buyers, leaving little available for SFA projects in the short term.

As a result, we recommend that SFA awardees learn about the waiver process and work to educate their developers to prepare for project-based waivers in the short term.

## k) Where to Find Information About US-Based Solar Manufacturers?

DOE's Solar Energy Technologies Office (SETO) maintains [this US Solar Photovoltaic Manufacturing Map](#), which shows active manufacturing sites that contribute to the solar photovoltaic supply chain. It includes facilities' potential output, where known. To learn more about the state of the US solar manufacturing supply chain, you can also consult [SETO's webpage here](#).

Further, Solar Power World maintains a table list of [US solar manufacturers here](#). Note the tabs at the bottom of that table. They also maintain a list of [US inverter manufacturing locations](#) and a list of [US mounting manufacturers](#).

## 4. Waivers and Exemptions

### a) Can EPA Issue Waivers?

Yes. The head of the federal agency that provides the funding to which BABA is attached has authority to issue waivers.<sup>62</sup>

This means that each agency is responsible for offering waivers relevant to its own funding. A DOE waiver, for instance, would not apply to EPA funding. However, if the Secretary of Energy were to issue a general applicability waiver (see below) with respect to solar products, the EPA administrator would be influenced to follow her lead given the in-house expertise on energy supply chain within DOE. Note that federal agencies coordinate on this topic, among other things, through the Made in America Office or MIAO, which is housed at OMB. Other existing waivers have clearly

---

<sup>62</sup> Section 70914(b) of BABA and [2 CFR 184.7](#)

been coordinated between FHWA, for instance, and EPA. It is likely that solar or storage waivers would also be coordinated between EPA and DOE via MIAO, which is the ultimate arbiter.

## b) Can EPA Completely Waive BABA for Solar for All?

**Possibly, though at the time of writing EPA has not indicated that it intends to do so and has been very consistent in its messaging that BABA applies to the awards, which have now been obligated. The Buy America Preference is included both in the general and the specific terms and conditions applicable to SFA awards.**

Generally, EPA can only issue waivers that comply with the processes set forth in federal regulations. The various ways that waivers can be obtained are detailed in [2 CFR 184.7](#) and briefly introduced below. OMB specifically directs agencies to issue “project level” and “product specific” waivers instead of program-wide waivers.<sup>63</sup>

However, so called “general applicability waivers” are authorized by statute<sup>64</sup> and the federal code,<sup>65</sup> and have been issued by EPA as well as other agencies. See below for more information and examples.

In addition, OMB directs agencies to design waivers so that they are, if possible, time-limited (i.e., not everlasting), targeted (i.e., attached to a product or material rather than a whole project), and conditional (i.e., support the policy of the domestic preference policy of the administration).<sup>66</sup>

## c) What Kind of Waivers Exist?

As per [2 CFR 184.7\(a\)](#), EPA can grant waivers for:

- **Public interest** where applying the domestic content procurement preference would be inconsistent with the public interest. This category of waivers includes “general applicability waivers” further described below;
- **Nonavailability** where iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
- **Unreasonable cost** where inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent.

## d) What Is a General Applicability Waiver?

OMB defines general applicability waivers as waivers that “appl[y] generally across multiple agency projects or awards,”<sup>67</sup> and [2 CFR 184.7\(e\)](#) defines them as waivers that “apply generally across multiple Federal awards.” They can only be issued by agencies “when necessary to advance an agency’s mission and goals, consistent with IJJA, [[Executive Order 14005](#)] and this guidance

---

<sup>63</sup> See [M-24-02](#), pg. 9.

<sup>64</sup> Sec. 70914 of IJJA

<sup>65</sup> [2 CFR 184.7\(e\)](#)

<sup>66</sup> Supra note 63

<sup>67</sup> See [M-24-02](#), pg. 13.

[M-24-02]. For example, an agency might issue a general applicability waiver for a product for which there are well-established domestic sourcing challenges.”<sup>68</sup>

It further states that a general applicability waiver can be “product-specific”, or generally apply to one type of material and be “non-product specific.” General applicability waivers will require appropriate justification from the Federal agency.

### e) What Kinds of General Applicability Public Interest Waiver Can EPA Issue and Which Has EPA Already Issued?

As per OMB, general applicability public interest waivers may be any of the following. The first three categories relate to reducing the administrative burden on agencies and recipients. Each category is followed by examples (indicated with an →) from EPA’s current waivers, which should help illustrate the concepts in practice:

- **De minimis** waivers might allow small purchases below a certain threshold to forego BABA compliance. “For instance, an agency might set a de minimis threshold at five percent of project costs, up to \$1,000,000, where these costs are subject to Buy America rules.”<sup>69</sup>  
→ EPA’s **October 21, 2022 De Minimis General Applicability Waiver is available [here](#)**, and waives BABA requirements “for products used in and incorporated into a project that cumulatively comprise no more than five percent of the total project cost.”<sup>70</sup> This waiver is relevant for miscellaneous products, for which “the country of manufacture and the availability of alternatives are not always readily or reasonably identifiable prior to procurement in the normal course of business,” as opposed to the products for which project-specific technical specifications, alternatives, costs, and countries of manufacture are greatly detailed and known.
- **Small grants** waivers for awards at or below \$250,000 can apply if both (a) the award is below this amount and (b) the total federal funding for a project is not expected to exceed this amount. This type of waiver could be phased out as agencies improve their waiver processing capabilities.  
→ EPA’s **September 26, 2022 Small Projects General Applicability Waiver is available [here](#)**, and waives BABA requirements for “small projects, where assistance agreements or subawards under assistance agreements are less than \$250,000.”<sup>71</sup> See below in Section

---

<sup>68</sup> Id.

<sup>69</sup> Id., pg. 11

<sup>70</sup> [Decision Memorandum regarding Public Interest: De Minimis General Applicability Waiver of Section 70914\(a\) of P.L. 117-58, Build America, Buy America Act, 2021 for U.S. Environmental Protection Agency Financial Assistance Awards and Procurements](#) issued on October 21, 2022. In addition, the waiver states that it is “not additive with the existing American Iron and Steel national de minimis waiver” and EPA will review the decision every five years following its issuance. American Iron and Steel requirements apply to Clean Water State Revolving Fund, Drinking Water State Revolving Fund, and Water Infrastructure Finance and Innovation Act projects. See [here](#) for additional information.

<sup>71</sup> [Decision Memorandum: Public Interest: Small Project General Applicability Waiver of Section 70914\(a\) of P.L. 117-58, Build America, Buy America Act, 2021 for U.S. Environmental Protection Agency Financial](#)

4(f) (*Is the Small Projects General Applicability Waiver Relevant for Solar for All?*) for more on this waiver and GGRF.

- **Minor Components:** Agencies might allow minor non-domestic components in otherwise domestically produced iron and steel products, that are normally required to be 100 percent sourced in the U.S. These minor components should not exceed “five percent of the total material cost of an otherwise domestically produced iron or steel product.”<sup>72</sup>

→ **EPA’s April 11, 2023 Minor Components General Applicability Waiver, available [here](#)**, waives BABA requirements for “the ferrous minor components of a product made primarily of iron and steel. The nonferrous components of the otherwise primarily iron and steel product may be from unknown or nondomestic sources and are not included in this waiver (but may contribute to the total materials cost of the product in question).”<sup>73</sup> This waiver was issued because EPA recognized that manufacturers would “face considerable challenges determining that their iron and steel products, which may contain trivial components of foreign or unknown origin, are compliant with [BABA].”<sup>74</sup>

- **International Trade Obligations:** If a state must comply with international trade agreements, a waiver might be granted to ensure compliance with these agreements.<sup>75</sup>

- **Other Considerations:** Waivers might be issued based on other circumstances, such as the resources available, the value of the items, domestic economic impacts, and other policy considerations including sustainability, equity, and performance standards.

→ **EPA’s July 5, 2023 General Applicability Public Interest Waiver for Pacific Island territories is available [here](#)**. This waiver applies to Guam, American Samoa, and the Commonwealth of the Mariana Islands and is meant to address shipping fees and long lead times to access US-made products due to the remote nature of these territories. This waiver is valid for 18 months and to be reviewed every 12 months.<sup>76</sup> It will be applicable to SFA recipients in those territories, namely, the Department of Administration of the Government of Guam and its subrecipients.

→ **EPA’s May 15, 2024 General Applicability Public Interest Waiver for the Clean Ports program, available [here](#)**, waives the 55% domestic content requirements for certain types of equipment but does not waive the requirement that these must be manufactured in the

---

[Assistance Awards](#) issued on September 26, 2022. EPA will review the decision every five years following its issuance.

<sup>72</sup> Supra, note 67, pg. 12

<sup>73</sup> [Decision Memorandum: Public Interest: Minor \(Ferrous\) Components of Iron and Steel Products General Applicability Waiver of Section 70914\(a\) of P.L. 117-58, Build America, Buy America Act, 2021 for U.S. Environmental Protection Agency Financial Assistance Awards](#) issued on April 11, 2023

<sup>74</sup> Id. pg. 2

<sup>75</sup> Supra, note 72

<sup>76</sup> [Decision Memorandum, Public Interest: Pacific Island Territories General Applicability Waiver of Section 70914\(a\) of P.L. 117-58, Build America, Buy America Act, 2021 for U.S. Environmental Protection Agency Financial Assistance Awards](#) issued on July 5, 2023

US to be considered “produced in the U.S.”<sup>77</sup> It also provides that recipients may also apply for a De Minimis waiver for a portion of the costs associated with certain equipment.<sup>78</sup>

→ EPA’s July 21, 2023 General Applicability Public Interest Waiver for EV chargers, available [here](#), waives BABA requirements for AC level 2 and DC fast-charging EV chargers for a limited time and provides a timeline for its phase out.<sup>79</sup>

→ EPA’s November 13, 2023 General Applicability Public Interest Waiver for State Revolving Fund and Water Infrastructure Projects that Initiated Design Planning prior to May 14, 2022, available [here](#). It waives BABA requirements temporarily for projects that were designed before any guidance from OMB was available. Two other waivers exist relevant to water infrastructure and that we chose not to include in this paper. See EPA’s full list [here](#).

## f) Is the Small Projects General Applicability Waiver Relevant for Solar for All?

No. This general applicability waiver applies where awards or subawards are less than \$250,000 in value. The size of projects funded under such subawards is only relevant if the size of the federal award (or subaward) is below \$250,000. Given the size of the GGRF SFA awards, it is very unlikely that even subawards for infrastructure would be below \$250,000. This interpretation was confirmed by EPA in an FAQ answer, where EPA stated that this waiver “cannot be interpreted to waive small projects financed via Participant Support Costs or Acquisitions of Intangible Property below \$250,000 where the value of the award or Subaward financing those projects exceeds \$250,000.”<sup>80</sup>

## g) Where May I Find Information About Existing Waivers?

MIAO keeps a database of all waivers across federal agencies [here](#). Those relevant to BABA can be found by selecting the Financial Assistance categories under the “waiver type” selection button. EPA maintains a list of existing approved BABA waivers and those available for public comments on its website [here](#).

## h) Can EPA Issue Waivers even after GGRF Awards Are Made?

Yes.<sup>81</sup>

---

<sup>77</sup> See Section 3(d)(What Is Considered “Produced in the United States” under BABA?) above for additional information on this requirement.

<sup>78</sup> [Decision Memorandum, General Applicability Public Interest Waiver of Section 70914\(a\) of P.L. 117-58, Build America, Buy America Act, 2021 for U.S. Environmental Protection Agency Financial Assistance Awards under the Clean Ports Program](#) issued on May 15, 2024. The waiver includes detailed deadlines for the order date, contracted delivery date, and actual delivery date for applicability.

<sup>79</sup> [Decision Memorandum, Public Interest: Electronic Vehicle Chargers Product Waiver of Section 70914\(a\) of P. L. 117-58, Build America, Buy America Act, 2021 for U.S. Environmental Protection Agency Financial Assistance Awards](#), issued on July 21, 2023. Note that this waiver was coordinated with FHWA so that requirements are the same across both agencies.

<sup>80</sup> EPA FAQ to selectees posted on June 27, 2024

<sup>81</sup> See [M-24-02](#), pg. 10.

### i) Are Waivers Retroactive?

No. They can be issued after awards are made but they do not apply retroactively to expenditures that have already been incurred.<sup>82</sup>

### j) Who Can Offer Waivers for Projects Receiving Funding from Multiple Agencies?

As per EPA, if a project has multiple funding sources, the agency contributing the greatest amount of federal funds is considered the “cognizant agency” and is responsible for consulting with the other agencies on waiver issues, waiver applications, publicizing the proposed joint waiver, and submitting the proposed joint waiver for review to MIAO.<sup>83</sup>

### k) What Is the Process for a Waiver to be Approved?

Generally, waivers require a written note of justification and a 15-day public comment period, which increases to 30 days for general applicability waivers. Additional information about the application process can be found in [2 CFR 184.7](#) and [M-24-02](#), which detail the waiver process.

All waiver requests must include a detailed justification for using foreign goods and a certification of efforts to source domestic products. [The form approved by OMB to submit a waiver request is available on the General Services Administration’s website here.](#)

### l) What New Tariffs Could Apply to Imported Products for SFA Projects?

See Section B of [CESA’s email to SFA awardees](#) dated May 30, 2024, for basic information about tariffs that would influence SFA budgets on potentially waived projects.

## 5. Domestic Content Bonus Credit Basics

This section examines whether complying with BABA means automatically complying with the Domestic Content Bonus Credit and vice versa.

### a) What is the Domestic Content Bonus Credit?

The Domestic Content Bonus Credit is an additional credit amount of 10 percentage points over the base value of the Investment Tax Credit (ITC) or a 10 percent increase over the base value of the Production Tax Credit (PTC), i.e., 0.3¢/kWh. It is available for certain qualified facilities or energy projects that use a specified percentage of domestically produced steel, iron, or manufactured products. The Domestic Content Bonus Credit was introduced by the IRA to promote the use of American-made materials in energy projects and can be stacked with other tax credit bonuses.

To qualify for the Domestic Content Bonus Credit, (a) **all iron and steel**, including the entire manufacturing process from melting to finishing, and (b) **an increasing percentage of the manufactured products in a project**, as demonstrated by calculating the percentage of total costs

---

<sup>82</sup> Id.

<sup>83</sup> [Build America, Buy America Act Domestic Preference Overview](#), EPA

that is attributed to domestic production, must be “produced in the United States.”<sup>84</sup> The required percentage of domestic costs for all of the manufactured products in a facility, also called the “adjusted percentage,” starts at 40% for all projects beginning construction before 2025, increases to 45% for projects beginning construction in 2025, 50% for projects beginning construction in 2026, and 55% for projects beginning construction after 2026.<sup>85</sup>

Meeting this domestic content threshold is also required for projects with a maximum net output equal to or greater than 1 MW<sub>AC</sub> that seek to take advantage of the “direct pay” provisions of the IRA. The IRA allows non-taxable entities, previously unable to access tax credits, to directly monetize the ITC, the PTC, and their technology-neutral successors (among others) with direct pay. The rate of the tax credits available for direct pay will decrease over time until 2025, at which point direct pay will not be available for entities that do not meet domestic content requirements, unless projects have a maximum net output smaller than 1 MW<sub>AC</sub>.<sup>86</sup>

## b) What Does “Produced in the U.S.” Mean for the Domestic Content Bonus Credit?

To establish that it is eligible for the Domestic Content Bonus Credit, a taxpayer must certify that “any steel, iron, or manufactured product which is a component of [the Applicable Project]<sup>87</sup> (upon completion of construction) was produced in the United States (as determined under section [sic] 661 of title 49, Code of Federal Regulations).”<sup>88</sup>

- **Iron and steel** are produced in the US if all manufacturing processes with respect to steel or iron directly incorporated into projects took place in the US, except metallurgical processes involving refinement of steel additives.<sup>89</sup> Note here that iron and steel requirements apply to “construction materials made primarily of steel or iron and [that] are structural in function.”<sup>90</sup>
- **Manufactured Products** are produced in the US if (a) all the manufacturing processes for the manufactured product take place in the US and (b) all the manufactured product components are of US origin.<sup>91</sup> Under [49 CFR 661.5\(d\)](#), “[a] component is considered of U.S. origin if it is manufactured in the United States, regardless of the origin of its subcomponents.”<sup>92</sup> However, manufactured products are also “deemed to be produced in the United States if the Adjusted Percentage Rule in section 3.03(2) of Notice 2023-38 is satisfied.” See below for additional information about the Adjusted Percentage Rule and how it is calculated.

---

<sup>84</sup> [26 U.S.C. § 45\(b\)\(9\)\(B\)](#)

<sup>85</sup> [26 U.S.C. § 45\(b\)\(9\)\(C\)](#) (PTC) and [26 U.S.C. § 45Y\(g\)\(11\)\(C\)](#) (post ITC/PTC technology-neutral credit)

<sup>86</sup> See [26 U.S.C. § 48\(a\)\(12\)](#), [26 U.S.C. § 48\(a\)\(13\)](#), and [26 U.S.C. § 6417](#).

<sup>87</sup> An “Applicable Project” simply means here a project for which a tax credit that is eligible for the Domestic Content Bonus Credit is being sought, e.g., a project seeking to take the Section 48 Commercial ITC.

<sup>88</sup> Section 2.01 of [Notice 2023-38](#)

<sup>89</sup> Section 3.02 of [Notice 2023-38](#)

<sup>90</sup> Id.

<sup>91</sup> Section 3.03 of [Notice 2023-38](#), which mirrors [49 CFR 661.5\(d\)](#). Note that the domestic content requirements here are made to mirror the Buy American Act, not BABA.

<sup>92</sup> Incorporated by reference under Section 45(b)(9)(B)(i) of the Internal Revenue Code.

## c) How Does One Calculate Compliance with the Adjusted Percentage Rule?

**Step 1- Evaluate what is manufactured product vs. iron/steel.** Like with BABA, the first step to determine compliance is to understand which components of a project are manufactured products vs. steel or iron. As a rule of thumb, and as law firm Norton Rose Fulbright once put it, “Construction materials are materials that are made primarily of steel or iron and are structural in nature. If they are removed, things fall down.”<sup>93</sup> This structural nature is not part of the definition under BABA. The IRS, based on information provided by DOE, also provided a table for solar projects, available above in Section 3(e) (*How to Distinguish Between Iron/Steel/Construction Materials vs. Manufactured Products in a Solar for All Project?*). As a reminder, under the IRS classification, PV modules, trackers, battery packs, battery housing, and inverters are all considered manufactured products.

**Step 2- Meet the iron and steel requirement.** Once owners know which parts of a project are manufactured products, they should determine whether the iron and steel in the project is entirely produced in the US. If it is not, then the calculations relevant to manufactured products are moot, and the project does not qualify for the bonus credit.

**Step 3- Determine US origin.** Once it is assured that the iron and steel used in a project are produced in the US, the taxpayer must determine which components of the manufactured products are of US origin.

**Step 4- Calculate the domestic cost percentage or use the elective safe harbor tables.** This calculation is done at the project level and not at the manufactured product level so that not every manufactured product needs to meet the relevant adjusted percentage rule.

**a) EITHER calculate the Domestic Cost Percentage for the project.** Project owners can then calculate the “Domestic Cost Percentage” and determine whether it equals or exceeds the minimum threshold of the “Adjusted Percentage Rule.”

$$\text{Domestic Cost Percentage} = \frac{\text{Domestic Manufactured Products and Components Cost in US\$}}{\text{Total Manufactured Products Costs in US\$}}$$

For an example calculation from the IRS, see Section 3.03(2)(d) on page 11 of [Notice 2023-38](#).

**b) OR use the elective safe harbor for each and all manufactured products.** [Notice 2024-41](#) updated [Notice 2023-38](#). Much of the previous notice remains relevant, but [Notice 2024-41](#), updated the way that compliance with the Adjusted Percentage Rule could be shown by adding options to simplify the process. Instead of seeking information about costs from suppliers to perform the calculation above, project owners can now use new “elective safe harbor” rules and

---

<sup>93</sup> [Domestic Content Bonus Credit](#), K. Martin, D. Burton, and H. Lefko, 2023



simply add standard percentages from the table below to demonstrate compliance for select project types.<sup>94</sup>

<b>APC</b>	<b>MPC</b>	<b>Ground-mount (Tracking)</b>	<b>Ground-mount (Fixed)</b>	<b>Rooftop (MLPE)</b>	<b>Rooftop (String)</b>
<b>PV module</b>	Cells	36.9	49.2	21.5	30.8
	Frame/Backrail	5.3	7.0	3.1	4.4
	Front Glass	3.7	4.9	2.2	3.1
	Encapsulant	2.2	3.0	1.3	1.8
	Backsheet/Backglass	3.7	4.9	2.1	3.1
	Junction Box	1.6	2.2	1.0	1.4
	Edge Seals	0.2	0.2	0.1	0.2
	Pottants	0.2	0.2	0.1	0.2
	Adhesives	0.2	0.2	0.1	0.2
	Bus Ribbons	0.4	0.5	0.2	0.3
	Bypass Diodes	0.4	0.5	0.2	0.3
	<b>Production<sup>3</sup></b>	<b>11.5<sup>4</sup></b>	<b>15.3<sup>4</sup></b>	<b>6.7<sup>4</sup></b>	<b>9.6<sup>4</sup></b>
<b>Inverter</b>	Printed Circuit Board Assemblies	3.0	4.0	16.0 <sup>5</sup>	2.5
	Electrical Parts <sup>6</sup>	1.0	1.3	1.6	1.1
	Climate Control	0.7	0.9	-	0.3
	Enclosure	1.0	1.3	1.6	0.8
	<b>Production</b>	<b>3.3<sup>4</sup></b>	<b>4.4<sup>4</sup></b>	<b>16.4<sup>4</sup></b>	<b>2.9<sup>4</sup></b>
<b>PV Tracker or Non-Steel Roof Racking</b>	Torque tube	9.7	-	-	-
	Fasteners	0.4	-	11.1	16.0
	Slew Drive	2.0	-	-	-
	Dampers	0.4	-	-	-
	Motor	3.1	-	-	-
	Controller	0.9	-	-	-
	Rails	2.0	-	8.6	12.3
	<b>Production</b>	<b>6.2<sup>4</sup></b>	<b>-</b>	<b>6.1<sup>4</sup></b>	<b>8.7<sup>4</sup></b>
<b>Steel photovoltaic module racking</b>	-	-	Steel/Iron Product	-	-
<b>Pile or ground screw</b>	-	Steel/Iron Product	Steel/Iron Product	-	-
<b>Steel or iron rebar in foundation</b>	-	Steel/Iron Product	Steel/Iron Product	-	-
<b>Total</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 3: Solar PV elective safe harbor table - Source: IRS [Notice 2024-41](#)

These project types include four types of solar systems: a ground-mounted system with tracker, a fixed ground mounted system, a rooftop system using module level power electronics, and rooftop system using string inverters. They also include two types of battery systems, grid scale (>1 MWh nameplate capacity) and distributed (<= 1 MWh nameplate capacity).

<sup>94</sup> These percentages are based on the expected costs of components of manufactured products from [U.S. Solar Photovoltaic System and Energy Storage Cost Benchmarks, With Minimum Sustainable Price Analysis: Q1 2023](#), National Renewable Energy Laboratory, 2023.

If using the safe harbor tables, only the components listed in the table need to be considered. Components that are not on the table are ignored. In addition, if a taxpayer uses both domestic and foreign products within a manufactured product category, the notice provides a formula to prorate the percentages based on the nameplate capacity that is domestic.

The IRS provides detailed example calculations starting on page 19 of [Notice 2024-41](#). In addition, [this excellent article from Norton Rose Fulbright](#) provides simpler plain English examples, and DOE also produced a [helpful webinar](#) that goes into detail through example calculations, including the more complicated calculations relevant to solar+storage [here](#).

Note that a taxpayer cannot decide to use only part of the safe harbor percentages; if it uses them, it must use them for the whole project. In addition, if a project type is not considered, then the taxpayer must revert to the cost calculation above.

**Step 5- Compare the result with the current Adjusted Percentage Rule number.** Once the calculation above is done, taxpayers will compare the result with the relevant percentages below based on the year the project started construction.

Projects beginning construction	Projects' domestic cost percentage or elective safe harbor table result must meet or exceed
<b>Before 2025</b>	40%
<b>In 2025</b>	45%
<b>In 2026</b>	50%
<b>After 2026</b>	55%

Table 4: Manufactured products adjusted percentages over time

Compliance with the Domestic Content Bonus Credit must be demonstrated at the time of the project's placement in service. Certification procedures are detailed on page 17 of [Notice 2024-41](#).

### d) Are the Buy America Preference and the Domestic Content Bonus Credit Requirements the Same?

No. They look very much like one another but there are subtle definitional differences and different cost calculation processes that will require careful attention when attempting to meet compliance requirements for both.

Both have 100% US-produced steel and iron requirements. However, definitions do not match across the standards. For example, the tax credit standard is not applicable to iron and steel that is not structural in nature. In addition, EPA has already issued a Minor Components waiver for iron and steel products.<sup>95</sup> That waiver does not create any exemption for projects that seek to meet the Domestic Content Bonus Credit requirements, which still have to meet the 100% threshold to qualify for the credit. While BABA covers three main categories of products (iron/steel, manufactured products, and construction materials), the tax credits only cover two categories

<sup>95</sup> See Section 4.e) (*What Kinds of General Applicability Public Interest Waiver Can EPA Issue and Which Has EPA Already Issued?*)

(iron/steel and manufactured products), where iron/steel is a structural construction product instead.

Further, for purposes of the Domestic Content Bonus Credit, manufactured products are deemed to have been produced in the United States “if not less than the adjusted percentage (...) of the total costs of all such manufactured products of such facility are attributable to manufactured products (including components) which are mined, produced, or manufactured in the United States.”<sup>96</sup> This means that manufactured products can qualify as “produced in the United States,” by meeting the Adjusted Percentage Rule (i.e., exceeding 55 percent of domestic costs).

In contrast, the rules applicable under BABA require that the manufactured products be *both* “manufactured in the United States” *and* meet BABA’s 55 percent rule.<sup>97</sup> As stated above, while we believe, based on other definitions in the Code of Federal Regulations that the “manufactured in the United States” refers to the last stages in the process, this is not clear.

Beyond definitional differences, the methods for calculating compliance also seem to differ starkly. First, meeting the tax credit threshold can be done either using actual components’ costs or using the simpler elective safe harbor rule tables. That is not the case under BABA, which does not propose such simpler method.

Second, meeting the tax credit threshold is done at the project level, so that the costs (or cost percentages as the case may be) add up for the whole project. The regulatory language for BABA, however, seems to imply that the cost threshold must be met for each and every manufactured product within a project. This was confirmed by both MIAO and DOE.

In addition, and most obviously, note that while the standards will both ultimately be set at 55%, it is not yet the case.

Lastly, compliance and certification processes are different. See the comparison table/cheat sheet on the next pages below.

Based on the above, while common sense tells us that a project that meets BABA requirements would also meet the requirements of the Domestic Content Bonus Credit requirements, it is not guaranteed, and a detailed evaluation of projects must be done.

On the other hand, awardees should not rely on projects meeting the Domestic Content Bonus Credit requirements to meet BABA’s Buy America Preference. Going through a couple of projects with a developer will likely be necessary to understand the practical differences.

---

<sup>96</sup> [26 U.S.C. § 45Y\(g\)\(11\)\(B\) and \(C\)](#)

<sup>97</sup> [2 CFR 184.3 “Produced in the United States”](#)

## 6. Comparison Table – Cheat Sheet

	BABA	Domestic Content Bonus Credit
Relevant Categories of Products	<ul style="list-style-type: none"> <li>✓ Iron and steel</li> <li>✓ Manufactured products</li> <li>✓ Construction materials – does not include cement or cement-like products like aggregates</li> </ul>	<ul style="list-style-type: none"> <li>✓ Iron and steel</li> <li>✓ Manufactured products</li> </ul>
Manufactured Products	<ul style="list-style-type: none"> <li>✓ No solar or S+S products list available from EPA yet</li> <li>✓ Must have been manufactured in the US, <b>and</b></li> <li>✓ US costs components exceed <b>55%</b> of the total cost of all components for the manufactured product, <b>on a product basis</b></li> <li>✓ Not a manufactured product if product meets the definition of an iron or steel product, a construction material, or a “section 70917(c) material,” which is essentially a cement or cement-like material.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Category includes PV modules, trackers, battery packs, battery housing, and inverters</li> <li>✓ Manufacturing processes must take place in the US and all components are of U.S. origin, <b>or</b></li> <li>✓ US costs components meet or exceed Adjusted Percentage Rule <b>on a project basis</b> - <b>40%</b> for projects beginning construction before 2025, <b>45%</b> for projects beginning construction in 2025, <b>50%</b> for projects beginning construction in 2026, and <b>55%</b> for projects beginning construction after 2026</li> </ul>
Requires Actual Knowledge of Manufacturing Costs?	<ul style="list-style-type: none"> <li>✓ Yes</li> </ul>	<ul style="list-style-type: none"> <li>✓ Not if using the new elective safe harbor rules. Percentages are available for solar and BESS.</li> </ul>

	BABA	Domestic Content Bonus Credit
Iron and Steel	<ul style="list-style-type: none"><li>✓ Wholly or predominantly made of iron and/or steel</li><li>✓ 100% of iron, steel manufacturing processes must have occurred in the US, i.e., all activities from the initial melting stage through the application of coatings</li><li>✓ EPA-issued <b>minor components waiver for up to 5%</b> of the total material cost of an otherwise domestically produced iron or steel product</li></ul>	<ul style="list-style-type: none"><li>✓ Construction materials made primarily of steel or iron and that are structural in function</li><li>✓ 100% of iron and steel manufacturing processes must have occurred in the US, except metallurgical processes involving refinement of steel additives</li><li>✓ Waivers are not relevant for domestic content but may be relevant for direct pay access.</li></ul>