

GREENHOUSE GAS (GHG) EMISSIONS INTENSITIES QUESTIONNAIRE: FACILITY-LEVEL

U.S. INTERNATIONAL TRADE COMMISSION sa.emissions@usitc.gov

You are receiving this questionnaire because your company has identified your <u>facility</u> as having produced <u>covered steel and aluminum products</u> in the United States in 2022. Your response will be treated as confidential and information from your response will only be referenced in a way that ensures anonymity. If your facility did not produce steel or aluminum products in 2022, contact the team at the email address above.

The U.S. Trade Representative (Trade Representative) has requested that the U.S. International Trade Commission (Commission or USITC) generate estimates of the highest and average GHG emissions intensities for steel and aluminum products produced in the United States, which the Trade Representative states will inform discussions regarding the proposed Global Arrangement on Sustainable Steel and Aluminum. The products covered in this request are the steel and aluminum products noted in attachment B of the Trade Representative's <u>request letter</u>, a list that corresponds with the scope of imported goods listed in Presidential Proclamations 9704 and 9705 of March 8, 2018 (<u>83 Fed. Reg. 11619</u> and <u>83 Fed. Reg. 11625</u>, respectively, both issued March 15, 2018).

In her request, the Trade Representative specified that the Commission use a survey of firms with facilities producing these steel and aluminum products in the United States, as well as external public data sources, to develop these emissions intensity estimates. In response, the Commission instituted this factfinding investigation (Inv. No. 332-598) and issued this questionnaire to collect information directly from the facilities producing the covered products.

Your facility is required by law to respond to this questionnaire.

Follow all instructions and submit your response to the web-based questionnaire no later than June 8, 2024.

OMB number: 3117-0234; Expiration date: 03/31/2027 No response is required if a currently valid OMB control number is not displayed.

The Commission is requesting this information under the authority of section 332(g) of the Tariff Act of 1930 (19 U.S.C. § 1332(g)). Completing the questionnaire is mandatory, and failure to reply as directed can result in a subpoena or other order to compel the submission of records or information in your possession (19 U.S.C. § 1333(a)).

You can learn more about this investigation and the questionnaire at the following website: <u>https://www.usitc.gov/saemissions</u>. Contact the project team at <u>sa.emissions@usitc.gov</u> or at (202) 780-0230 with any additional questions.

Confidentiality

The Commission has designated the information you provide in response to this questionnaire as "confidential business information," unless such information is otherwise available to the public. The Commission may aggregate the information you provide with information from other questionnaire responses. The Commission will not publish information obtained from your questionnaire or an aggregation of your and other questionnaire responses in a manner that would identify your company/facility or reveal the operations of your company/facility. Section 332(g) of the Tariff Act of 1930 (19 U.S.C. § 1332(g)) provides that the Commission may not release information that it considers to be confidential business information unless the party submitting such information had notice, at the time of submission, that such information would be released by the Commission, or such party subsequently consents to the release of the information. Note that, although the U.S. Environmental Protection Agency (EPA) treats GHG emissions data it collects under the Greenhouse Gas Reporting Program (GHGRP) as public, the various input and production data that are not reported by the EPA but are collected by the Commission in this investigation will be treated as confidential business information consistent with the explanation above.

Distinction between EPA Greenhouse Gas Reporting Program data collection and reporting thresholds and USITC data collection in this questionnaire

To fulfill the Trade Representative's request for development of GHG emissions intensities for the steel and aluminum product categories specified in her letter, the Commission is collecting three broad types of data in this questionnaire:

- 1) Data inputs needed to generate facility-level estimates of scope 1 and 2 emissions related to the production of steel and aluminum and scope 3 emissions associated with the material and resource inputs for the production of steel and aluminum,
- 2) Production quantities of products produced at the facility, and
- 3) Data needed to allocate the emissions to different products if multiple products are produced at the same facility.

U.S. facilities from covered sources emitting 25,000 metric tons or more of carbon dioxide equivalent (CO_2e) of GHG emissions annually are required to report their scope 1 emissions to the EPA under the GHGRP on a yearly basis (40 C.F.R. §§ 98.2(a), 98.3(b)). To avoid redundant data collection, the Commission will not duplicate the data collection of the scope 1 emissions totals of GHGRP reporting facilities that have already provided these data to the EPA. The Commission will be collecting data inputs needed to generate scope 2 and scope 3 emissions, the production quantity of various steel and aluminum products at the facility, and any information needed to allocate the scope 1 emissions data reported under the GHGRP.

For facilities with emissions falling beneath the EPA's 25,000 metric ton CO_2e annual GHG emissions GHGRP reporting threshold, the Commission has designed this questionnaire to gather data inputs relevant to the calculation of scope 1, 2, and 3 emissions. The Commission has endeavored to collect these data inputs to allow for the calculation of scope 1 emissions totals that are consistent with totals that would be generated under the GHGRP reporting methodologies, to the extent practicable.

Instructions for Completing the Questionnaire

1. Accessing the questionnaire. To provide your company's or facility's response to this questionnaire, use the secure interactive website version, accessible at this link:

https://www.usitc.gov/saemissions

For the purposes of viewing the full questionnaire, a PDF version is available at the link above.

You received a notification letter or email that includes a 10-character questionnaire token. Type the website link above into an internet browser (or click the link above) and access the questionnaire for online completion using your 10-character questionnaire token. If you have issues with your token or accessing the questionnaire, please email <u>sa.emissions@usitc.gov</u> for assistance.

Note that <u>orange</u> text indicates the word or phrase as defined in the glossary. [*Blue bracketed*] text indicates skip logic associated with a question or a sub-question. {*Green bracketed*} text indicated additional information that has been included as hover text in the web version.

2. Entering information. Answer each question to the best of your abilities as it applies to your company or facility. Some questions require you to answer by using the provided checkboxes; others require a response to be typed into entry areas. The questionnaire automatically saves your response as you navigate through, and you can leave and return at any time (using the same questionnaire access procedures noted above) until you submit your response. You will have an opportunity to review your answers, edit them, and download a copy of your questionnaire response before submitting it. You must contact the project team to make any changes after you have submitted your questionnaire response.

3. Entering numeric data. Enter numeric data in actual units (as indicated within the question text)—not in thousands, millions, or other multiples of units. <u>Do not add commas between digits or shorten the figure with a decimal point.</u> For example, for 123.4 million short tons, enter "123400000" (do not enter "123400" or "123,4" or "123,400,000") and for 63 percent, enter "63" (do not enter "0.63" or "63%").

4. **Questionnaire structure.** This questionnaire collects data for calendar year 2022, is composed of eight sections, and will be completed in two parts as follows:

- Your company representative will have filled out, certified, and submitted your company's response to the company-level questionnaire, identifying your facilities that produced covered steel or aluminum products in 2022. They were asked to provide a point of contact—including name and email—for each facility. This point of contact could have been the same person for all facilities or vary by facility.
- 2) Contacts for each facility in your response to the company-level questionnaire will receive an email from the Commission with a questionnaire token specific to that facility, a link to the questionnaire, and instructions on completing the facility-level questionnaire. If the point of contact is the same for multiple facilities, they will receive an email and questionnaire token for each facility.

Read and answer section 1 questions carefully because these responses will determine which questions you must complete in every section that follows. Much of the questionnaire contains material-specific or

product-specific questions that will not be displayed to facilities that do not indicate they use those materials or produce specific products in section 1.

5. **Saving the questionnaire.** Your response is saved as you navigate through the questionnaire. You can close the questionnaire at any time and login using the assigned facility-level token. Subsequent logins will take you to the page where you left off.

6. **Submitting the questionnaire.** After you have completed and reviewed all applicable sections, you may download a copy before submitting. Select the "submit" button to securely send your final response.

How to report information about your facility (sections 1.2 through 8)

Facility-level questionnaire. Each facility identified by the company will receive one questionnaire token to complete questionnaire sections 1.2 through 8. Information provided in each questionnaire should only apply to that facility. If individuals or departments within your facility will share responsibility for completing this questionnaire, please coordinate and combine their responses to submit one response per facility. *This questionnaire is not intended for facilities that are only processors of steel or aluminum, other than those facilities that solely produce secondary unwrought aluminum from other forms of secondary unwrought aluminum and facilities that solely heat treat steel products.*

Note: Section 4 requests information on facility-level purchases of U.S. energy attribute certificates for renewable or zero-emission energy such as renewable energy certificates (RECs). If your company purchases U.S. energy attribute certificates at a corporate level, please ensure each certificate is allocated to one and only one facility. Company-level coordination with facilities may be needed to ensure facilities can provide the detail requested in section 4 on U.S. energy attribute certificates.

Definitions/Glossary

A – B

Air pollution control residue—dust and sludge that leave an electric arc furnace (EAF) steelmaking process or similar process and may contain carbon. Air pollution control residue is incorporated as an output of EAF processes within mass balance equations under the U.S. Environmental Protection Agency's (EPA's) mandatory Greenhouse Gas Reporting Program (GHGRP) subpart Q.

Alloying elements—metallic elements added during the melting of aluminum for the purpose of increasing corrosion resistance, hardness, or strength. Alloying elements used in steel are referred to as "ferroalloys and other alloying metals" (see below).

Aluminum—aluminum products covered under this investigation, include unwrought aluminum, whether alloyed or unalloyed, wrought aluminum bars, rods, profiles, wire, plates, sheets, strip, foil, tubes, pipes, pipe and tube fittings, and forgings, and castings. Note: for a full list of products covered in this investigation, see attachment B to the Trade Representative's letter requesting this investigation, which you can download <u>here</u>.

Aluminum bars, rods, and profiles—wrought aluminum products with a solid cross-section, typically produced via extrusion. Aluminum rods have a solid circular cross section; bars can have a number of flat sides. Profiles, also referred to as "shapes" or "sections" have various cross-sectional shapes that differ from those of other wrought products. Aluminum bars, rods, and profiles are those products corresponding to the Harmonized Tariff Schedule of the United States (HTS) heading 7604.

Aluminum castings—the solid, rough, finished, or near-finished (near-net) aluminum shapes resulting from the foundry or die-casting processes. Aluminum castings are defined in this investigation as those products corresponding to HTS statistical reporting number 7616.99.5160.

Aluminum foil—flat-rolled wrought aluminum of thickness not exceeding 0.20 millimeters. Aluminum foil products are those corresponding to HTS heading 7607.

Aluminum forgings—mechanical (wrought) products formed by applying pressure to shape unwrought aluminum using either open or closed dies. Aluminum forgings are defined in this investigation as those products corresponding to HTS statistical reporting number 7616.99.5170.

Aluminum plates, sheets, and strip—flat-rolled wrought aluminum products. Plates are at least 6.0 millimeters thick (6.3 millimeters in the United States) and are cut to length. Sheets range in thickness from 0.20 millimeters to under 6.3 millimeters (0.15 millimeters to under 6.3 millimeters in the United States). Strip is slit from coiled aluminum into narrower widths than the original coil. Aluminum plates, sheets, and strip are those products corresponding to HTS heading 7606.

Aluminum tubes and pipe fittings—wrought aluminum products such as couplings, elbows, and sleeves. Aluminum tubes and pipe fittings are those products corresponding to HTS heading 7609.

Aluminum tubes and pipes—hollow wrought aluminum products. Tubes have uniform wall thicknesses along their length. Pipes are a type of tube with standardized outside diameter and wall thicknesses. Aluminum tubes and pipes are those products corresponding to HTS heading 7608.

Aluminum wire—wire produced by drawing unwrought aluminum wire rod through one or more steel dies to attain the desired final outside dimensions. Wires do not exceed 10.0 millimeters in maximum diameter. Aluminum wire products are those corresponding to HTS heading 7605.

Aluminum, primary unwrought—aluminum, whether in cast or liquid form but not further machined or processed, (either pure or alloyed) produced directly from the electrolytic smelting of alumina, typically at a primary smelter. For the purposes of this questionnaire, primary unwrought aluminum production includes all activities related to production occurring at the smelter, as well as on-site anode baking, casting (if applicable) and any sort of finishing steps, e.g., heat treatment, that occurs after casting, such as homogenizing (if applicable). It also includes heating of any other inputs such as alloys or aluminum scrap into the production process.

Aluminum, secondary unwrought—aluminum, whether in cast or liquid form but not further machined or processed, produced by melting down aluminum scrap, usually along with some primary aluminum and alloying metals. Includes secondary unwrought aluminum produced from dross. For the purposes of this questionnaire, secondary unwrought aluminum production includes any preheating or delaquering of aluminum scrap, heating of inputs such as primary unwrought aluminum or alloys, melting, casting (if applicable), and any sort of finishing steps, e.g., heat treatment, that occurs after casting, such as homogenizing (if applicable).

Aluminum, unwrought—ingots, slabs, blocks, billets, sows, etc., produced by casting molten aluminum of either primary or secondary origin, but not further machined or processed, other than by simple trimming, scalping, or descaling. Unwrought aluminum products are defined in this investigation as those corresponding to HTS heading 7601.

Aluminum, wrought—rolled, drawn, extruded, forged, or otherwise mechanically worked (formed) aluminum products. For the purposes of this questionnaire, this includes aluminum bars, rods, profiles, plates, sheets, strip, foil, wire, pipe, tube, pipe and tube fittings, castings (such as die castings or sand castings), and forgings. Wrought aluminum products are defined in this investigation as those corresponding to HTS headings 7604, 7605, 7606, 7607, 7608, 7609, and HTS statistical reporting numbers 7616.99.5160 and 7616.99.5170. For the purposes of this questionnaire, wrought aluminum production includes the rolling, drawing, extruding, forging, die-casting or foundry casting of any unwrought aluminum product into one or more of the product groups included in this definition. It also includes the transformation of a wrought product into another wrought product (e.g., sheet to foil). Wrought aluminum production also includes any preheating of unwrought aluminum inputs that are required before the rolling, drawing, extruding, forging, die-casting, or foundry casting processes. It also includes any finishing steps, e.g., heat treatment, that occurs after the wrought product is shaped such as precipitation heat-treating, or aging (if applicable).

Basic oxygen furnace (BOF)—any refractory-lined vessel in which high-purity oxygen is blown under pressure through a bath of molten iron, scrap metal, and fluxes to remove impurities and convert the mixture to steel. BOFs are generally located at integrated iron and steel plants, where molten iron is produced in blast furnaces before being fed into the BOF. Also known as a basic oxygen process furnace (BOPF).

Blast furnace (BF)—a furnace used to produce molten iron from iron ore pellets and other iron-bearing materials. Blast furnaces are generally located at integrated iron and steel plants, with molten iron being fed directly into basic oxygen furnaces (BOFs).

Blast furnace gas—the combustible waste gas generated in a blast furnace when iron ore is being reduced with coke to metallic iron. This gas is commonly used as a fuel within steel facilities or is flared.

С – Е

Calcined dolime—this mix of lime (CaO) and magnesia (MgO) is the high-temperature product from the heating (calcining) of non-calcined dolomite. Calcined dolime is also referred to as calcined dolomitic limestone, dolime, or calcium-magnesium oxide (CaMgO₂).

Calcined lime—the high-temperature product from heating (calcining) limestone. Lime is used to help remove impurities such as sulfur, phosphorus, and silica in the ironmaking and steelmaking processes. Calcined lime is also referred to as calcium oxide (CaO) or lime.

Carbon and other alloy steel—all steels other than stainless steel (including nonalloy steel, low-alloy steel, silicon electrical steel, high-speed steel, silicomanganese steel, tool steel, chipper-knife steel, heat-resisting steel, ball bearing steel, etc.).

Carbon anode—a carbon block used to conduct electricity. Carbon anodes are inserted into an aluminum pot during the primary aluminum smelting process.

Carbon content—the mass of carbon as a share of the total mass of a material.

Carbon dioxide equivalent (CO₂-equivalent or CO₂e)—the number of metric tons of CO₂ emissions with the same global warming potential (GWP) as one metric ton of another greenhouse gas.

Carbon electrodes—graphite electrodes that are the main heating element used in the electric arc furnace (EAF) steelmaking process. Electrodes are part of the EAF furnace lid and are assembled into columns. Electricity then passes through the electrodes, forming an arc of intense heat that melts the scrap steel. Graphite electrodes can also be used in a ladle metallurgy furnace and specialty furnace applications.

Casting—the process by which hot liquid steel or aluminum is poured into a mold and cooled to produce its first solid form. For wrought aluminum production, as defined by this questionnaire, casting can also include the solid, finished, or near-finished aluminum shapes resulting from the foundry or die-casting processes. For the purposes of this questionnaire, questions on aluminum casting processes include any heat treating of products occurring after casting, such as homogenizing of aluminum billets.

Coal and coal-based carbon additives—coal and other sources of carbon derived from coal (other than coke) that are primarily used as feedstock, not fuel. Examples of coal and coal-based carbon additives include coal used to produce metallurgical coke or high purity carbon products that are charged or injected into steelmaking furnaces.

Coated flat steel products—includes carbon and other alloy steel sheets, strips, and plates that have been clad, plated, or coated with metal, in either coils or cut lengths. Examples include flat steel products that are hot-dipped or electrolytically galvanized; or those coated with Galvalume, tin or chromium (tin-free), or other metals. Carbon and other alloy coated flat steel products are those corresponding to HTS headings 7210 (other than HTS statistical reporting number 7210.70.3000) and 7212 (other than HTS subheading 7212.40), HTS subheadings 7225.91 and 7225.92, and HTS statistical reporting numbers 7226.99.0110 and 7226.99.0130.

Coating, cladding, or plating flat steel products—all processes occurring at a facility that are used to coat, clad, or plate flat steel products with metal (e.g., hot-dip or electrolytic galvanize lines, Galvalume coating, tin mills) and any finishing operations that further process these goods (e.g., annealing, cutting).

Cogeneration (also known as combined heat and power, or CHP)—an integrated approach to generating multiple output streams (electric power and thermal energy) from a single fuel source. For industrial facilities, cogeneration is typically located on-site and captures heat and off-gases that would

otherwise go unused to provide thermal energy such as steam or hot water and generate electricity. For the purposes of this questionnaire, on-site cogeneration refers only to units that are operated by your facility.

Coke breeze—fine sizes of coke, usually less than one-half inch in diameter, that are recovered from coke plants. It is commonly used for sintering iron ore.

Coke oven gas—the combustible waste gas produced by the carbonization of coal in a coke oven at temperatures in excess of 1,000 °C. This gas is commonly used as fuel within coke producing facilities or is flared.

Cold forming/cold finishing long steel products—all processes occurring at a facility that are used to cold form, cold finish, or cold draw long steel products, including any finishing operations that further process these goods (e.g., annealing, pickling, cutting). Also includes any process used to draw or roll wire.

Cold rolling flat steel products—all processes occurring at a facility that are used to transform hot-rolled flat steel into cold-rolled flat steel products. Such processes include the cold-rolling mill itself as well as any post-cold rolling operations that further finish cold-rolled flat steel products (e.g., annealing, pickling, cutting, painting). For carbon and other alloy steel, cold rolling does not include coating, cladding, or plating of steel with metal or any process occurring in a facility downstream from those processes. For stainless steel, such processes are included within the definition of cold rolling flat steel products.

Cold-formed/finished long steel products—includes cold-formed, cold-finished, or cold-drawn bars, whether or not coated with metallic or nonmetallic materials (e.g., plastics, paint, etc.). Also includes all steel wire. Stainless cold-formed/finished long steel products are those corresponding to HTS subheadings 7222.20 and 7222.30, and HTS heading 7223. Carbon and other alloy cold-formed/finished long steel products are those corresponding to HTS headings 7215, 7217, and 7229; HTS subheadings 7228.50, 7228.60, and 7228.20.50; and HTS statistical reporting numbers 7228.10.0030 and 7228.10.0060.

Cold-rolled flat steel products—includes cold-rolled sheets, strips, and plates, whether or not annealed, pickled, tempered, or cold-reduced, in either coils or cut lengths. Stainless cold-rolled flat steel products may be clad, plated, or coated with metallic or nonmetallic materials. If carbon and other alloy steel is clad, plated, or coated with metal, these are included in the "coated flat steel products" category. Stainless cold-rolled flat steel products include those corresponding to HTS subheadings 7219.31, 7219.32, 7219.33, 7219.34, 7219.35, 7219.90, 7220.20, and 7220.90. Carbon and other alloy cold-rolled flat steel products include those corresponding 7209, HTS subheadings 7211.23, 7211.29, 7211.90, 7212.40, 7225.50, 7225.99, and 7226.92, and HTS statistical reporting numbers 7210.70.3000 and 7226.99.0180.

Combustion emissions—emissions released from the intentional combustion of fuels that results in oxidation of materials within an apparatus designed to raise heat and provide it either as heat, steam, or power to a process or for use away from the apparatus.

Continuous emissions monitoring system (CEMS)—a set of equipment used to directly measure a gas or particulate matter concentration or emission rate. A CEMS is required under some of the EPA regulations for either continual compliance determinations or determination of exceedances of the standards.

Cooling agent—refers to natural gas or another input used to provide cooling directly around a piece of equipment within a furnace (e.g., a tuyere) that would otherwise be subject to degradation due to the high heat inside the furnace.

Country of melt and pour (steel)—the location where the raw steel is: (1) first produced in a steelmaking furnace in a liquid state; and (2) poured into its first solid shape. The first solid state can take the form of either a semifinished/crude steel product (i.e., ingot, bloom, slab, billet, beam blank, etc.) or a finished steel mill product. The location of melt and pour is customarily identified on mill test certificates that are commonplace in steel production.

Country of smelt (aluminum)—the country where new aluminum metal is produced from alumina (or aluminum oxide) by the electrolytic Hall-Héroult Process. The country of smelt is customarily identified on import licenses, which are required for U.S. imports of aluminum products containing primary aluminum. The country of smelt may be different from the country of origin and the country of exportation.

Covered steel and aluminum products—products that correspond to the Harmonized Tariff Schedule of the United States (HTS) tariff lines and statistical annotations listed in attachment B of the letter from the Trade Representative requesting this investigation. See her request letter <u>here</u>.

Cradle-to-gate—describes the bounds of a product life cycle analysis accounting for the environmental impact of inputs and processes in the creation of the product, from resource extraction (cradle) to the factory gate (i.e., before it leaves the factory to be transported to the consumer). Cradle-to-gate life cycle analyses are sometimes assessed to measure the greenhouse gas emissions of a product.

Decarburization—also known as argon oxygen decarburization (AOD), a process used to further refine the steel outside the electric arc furnace (EAF) during the production of certain stainless and specialty steels. In the AOD process, steel from the EAF is transferred into an AOD vessel, and gaseous mixtures containing argon and either oxygen or nitrogen are blown into the vessel to reduce the carbon content of the steel.

Direct line connection—a purchase of electricity by an organization through an electricity connection outside of the distribution grid. Examples of electric generation sources for direct line connections include generation facilities located at a central plant of a campus or other nearby building, or on-site generation facilities that are owned or operated by another organization.

Direct reduced iron (DRI)—iron made from the chemical removal of oxygen from iron ore in its solid form, without melting in a furnace, using hydrogen and carbon monoxide (generally derived from natural gas, synthetic gas (syngas), or coal) as reducing agents. DRI can be used in EAFs, BOFs, or blast furnaces.

EIA/ORIS plant code—a facility's Office of Regulatory Information Systems Plant Location (ORIS) code is a unique identifier issued by the U.S. Energy Information Administration (EIA) or the EPA's Clean Air Markets Division to power plants owned by utility companies that can be used to identify these facilities in the EPA's Clean Air Markets Division's Power Sector Emissions Data and in the EIA's Electric Power datasets. Note: you can look up the ORIS codes of power plants under the "plant code" column in the "List of plants for all fuels, United States, all sectors" table in the EIA's Electricity Data Browser <u>here</u>.

Electric arc furnace (EAF)—a furnace that produces molten steel by heating the charge materials (primarily ferrous scrap) with electric arcs from carbon electrodes.

Emergency equipment—any auxiliary fossil fuel-powered equipment, such as a fire pump, that is used only in emergency situations (40 C.F.R. § 98.6).

Emergency generator—a stationary combustion device, such as a reciprocating internal combustion engine or turbine that serves solely as a secondary source of mechanical or electrical power whenever the primary energy supply is disrupted or discontinued during power outages or natural disasters that are beyond the control of the owner or operator of a facility. An emergency generator operates only during emergency situations, for training of personnel under simulated emergency conditions, as part of emergency demand response procedures, or for standard performance testing procedures as required by law or by the generator manufacturer. A generator that serves as a backup power source under conditions of load shedding, peak shaving, power interruptions pursuant to an interruptible power service agreement, or scheduled facility maintenance shall not be considered an emergency generator (40 C.F.R. § 98.6).

Energy attribute certificate (EAC)—a category of contractual instrument that represents certain information (or attributes) about the energy generated but does not represent the energy itself. This category includes a variety of instruments with different names, including certificates, tags, credits, or generator declarations. Note: in this questionnaire, only the renewable energy certificates (RECs) or certificates representing your plant's zero-emission attribute should be considered.

External source—any facility other than the facility responding to the questionnaire that produces materials and products used in the responding facility's production. External sources include off-site facilities under different ownership, off-site facilities that share common ownership to the facility responding to the questionnaire, and facilities on-site that are not under the operational control of the facility responding to the questionnaire. The facility responding to the questionnaire may receive materials from external sources under a variety of arrangements, including purchases, transfers, or toll processing arrangements.

F – O

Facility—a manufacturing site located on one or more contiguous or adjacent properties under common operational control. Note: if you are reporting under the GHGRP, your facility in this questionnaire response should map to a facility registered in your company's Electronic Greenhouse Gas Reporting Tool (e-GGRT) user account.

Ferroalloys and other alloying metals—elements added during the melting of steel for the purpose of controlling inclusions, deoxidation, or increasing corrosion resistance, hardness, or strength. Examples include, but are not limited to, ferronickel, nickel metal, ferrochromium, and silicon.

Ferrous—refers to a material containing or consisting primarily of iron (including steel).

Flare—a high-temperature oxidation process used to burn waste gases containing combustible components such as volatile organic compounds, including blast furnace gas and coke oven gas.

Flux materials—materials such as lime derived from limestone or dolomite that are used to separate impurities such as sulfur, phosphorus, and silica in the ironmaking and steelmaking processes.

Fugitive emissions—intentional or unintentional release of greenhouse gases that may occur during the extraction, processing, transformation, and delivery of fossil fuels to the point of final use (e.g., methane and carbon dioxide releases from ventilation and degasification in coal mining; post-mining coal storage; leaks, venting, and flaring in natural gas systems).

Global warming potential (GWP)—ratio of time-integrated radiative forcing from the instantaneous release of one kilogram of a trace substance relative to that of one kilogram of a reference gas (i.e., CO₂). This questionnaire uses GWP definitions and ratios from the GHGRP, which are evaluated on a 100-year time horizon and are listed in Table A-1 to 40 C.F.R. § 98.

Greenhouse gas (GHG)—gases, both naturally occurring and generated from human-related activities such as household, commercial, and industrial applications and processes, that trap heat in the atmosphere. This questionnaire uses the definition of GHG as defined by the GHGRP in 40 C.F.R. § 98.6, which is carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other fluorinated greenhouse gases.

Greenhouse Gas Reporting Program (GHGRP)—the EPA's mandatory program established under 40 C.F.R. § 98. This program requires annual reporting of greenhouse gas (GHG) data and other relevant information from large GHG-emitting facilities, fuel and industrial gas suppliers, and CO_2 injection sites in the United States. Emissions data collected under this program from facilities are limited to select scope 1 emissions as defined in the regulation. Only U.S. facilities annually emitting over 25,000 metric tons (mt) of these emissions are required to report their emissions to the EPA under the GHGRP (40 C.F.R. §§ 98.2(a), 98.3(b)).

Hot briquetted iron (HBI)—a premium form of DRI that has been compacted at a temperature greater than 650 °C and has a density greater than 5,000 kilograms per cubic meter (5,000 kg/m³). Because of its compaction, HBI is less porous and, therefore, less reactive than DRI and does not suffer from the risk of self-heating associated with DRI. HBI can be used in EAFs, BOFs, or blast furnaces.

Hot rolling flat steel products—all processes occurring at a facility that are used to transform semifinished/crude steel into hot-rolled flat steel products. Such processes include the operation of tunnel furnaces, shuttle furnaces, and reheat furnaces to prepare steel for hot rolling; hot-rolling mills; and any post-hot rolling operations that further finish hot-rolled flat steel products (e.g., annealing, pickling, cutting, painting). Does not include cold rolling; coating, cladding, or plating of steel with metal; or any process occurring in a facility downstream from those processes.

Hot working long steel products—all processes occurring at a facility that are used to transform semifinished/crude steel into hot-worked long steel products. Such processes include the operation of tunnel furnaces, shuttle furnaces, and reheat furnaces to prepare steel for hot working; mills for hot rolling, hot drawing, hot extrusion, or hot-forging long steel products; and any post-hot working operations that further finish hot-worked long steel products (e.g., annealing, pickling, cutting). Does not include cold forming, cold finishing, and cold drawing processes, any wire drawing or rolling, or any process occurring in a facility downstream from those processes.

Heavy structural shapes and sheet piling—includes angles, shapes, and sections of carbon and other alloy steel with a height of 80 millimeters or more; and sheet piling. Heavy structural shapes and sheet piling correspond with HTS subheadings 7216.31, 7216.32, 7216.33, 7216.40, 7216.50, 7216.99, 7228.70, and 7301.10.

Hot-rolled flat steel products—includes hot-rolled sheets, strips, and plates, whether or not annealed, pickled, or tempered, in either coils or cut lengths, not cold-rolled nor clad, plated, or coated with metal. Stainless hot-rolled flat steel products include those corresponding to HTS subheadings 7219.11, 7219.12, 7219.13, 7219.14, 7219.21, 7219.22, 7219.23, 7219.24, 7220.11, and 7220.12. Carbon and other alloy hot-rolled flat steel products include those corresponding to HTS heading 7208 and HTS subheadings 7211.13, 7211.14, 7211.19, 7225.11, 7225.19, 7225.30, 7225.40, 7226.11, 7226.19, 7226.20, and 7226.91. (Note: painted or other non-metallically coated flat steel products that are not otherwise cold rolled or coated, plated, or clad with metal are considered hot-rolled flat steel products).

Hot-rolled plate—hot-rolled flat steel products that have a thickness of 4.75 millimeters or more, whether in coils or cut to length. Carbon and other alloy hot-rolled plate products are those corresponding to HTS subheadings 7208.10.15, 7208.10.30, 7208.25.30, 7208.25.60, 7208.36, 7208.37, 7208.40.30, 7208.51, 7208.52, 7211.13, 7211.14, 7225.30.11, 7225.30.30, 7225.40.11, 7225.40.30, and

7226.91.50. In this questionnaire, stainless hot-rolled plate is not distinguished from other stainless hot-rolled flat steel products.

Hot-worked long steel products—includes hot-rolled, hot-drawn, hot-extruded, or hot-forged bars, concrete reinforcing bars, structural shapes (angles, shapes, sections, and sheet pilings), rails, and wire rods, not cold-formed, cold-finished, or cold-drawn. Stainless hot-worked long steel products include those corresponding to HTS heading 7221 and HTS subheadings 7222.11, 7222.19, and 7222.40. Carbon and other alloy hot-worked long steel products include those corresponding to HTS headings 7216.10, 7216.21, 7216.22, 7216.31, 7216.32, 7216.33, 7216.40, 7216.50, 7216.99, 7228.20.10, 7228.30, 7228.70, 7228.80, and 7301.10 and HTS statistical reporting number 7228.10.0010.

Ingots and steel in other primary forms—steel in ingots or other primary forms, such as blocks, lumps, and puddled bars. Carbon and other alloy ingots and steel in other primary forms are those corresponding to HTS heading 7206 and HTS subheading 7224.10. Stainless ingots and steel in other primary forms are those corresponding to HTS subheading 7218.10.

Iron pellets (also known as iron ore pellets)—iron ore particles that have been rolled into little balls (typically 9–16 millimeters) in a balling drum and hardened by heat. Iron pellets are the primary iron ore input used by the U.S. steel industry in the production of pig iron in blast furnace operations. For purposes of this questionnaire, iron pellets also include any fines (smaller particles) that are produced by iron pellet plants.

Iron sinter—a fused aggregate of fine iron-bearing materials suited for use in a blast furnace. Sinter is composed of a combination of ore fines, other finely divided iron-bearing material, and fuel (typically coke breeze), and is typically 15–25 millimeters in size. To be considered iron sinter, sinter must contain more than 65 percent iron content. For purposes of this questionnaire, iron sinter also includes any fines (smaller particles) that are produced by iron sinter plants.

Ladle station—sometimes called a "ladle metallurgy furnace." The ladle station is an intermediate steel processing unit that further refines the chemistry and temperature of molten steel. The ladle metallurgy step comes after the steel is melted and refined in the EAF or BOF, but before the steel is cast.

Mass balance approach—a carbon accounting method which attributes the proportion of raw materials and their associated emissions to the end product.

Metallurgical coke—a form of coke used predominantly in blast furnaces to reduce iron ore to iron. It is produced by the distillation of coal in coke ovens, where the prepared coal is heated in an oxygen-free atmosphere (coked) until most volatile components in the coal are removed, leaving a carbon mass. Metallurgical coke includes coke breeze.

Non-calcined dolomite—a mix of calcium carbonate (CaCO₃) and magnesium carbonate (MgCO₃), also referred to as dolomitic limestone or calcium-magnesium carbonate (CaMg(CO₃)₂). It can be heated (calcined) to form dolime, a mix of lime (CaO) and magnesia (MgO) or calcium-magnesium oxide (CaMgO₂).

Non-calcined limestone—calcium carbonate (CaCO₃). It can be heated (calcined) to form lime (CaO).

Non-seamless steel tubular products—includes non-seamless tubes, pipes, and hollow profiles, but not fittings and other attachments. Stainless non-seamless steel tubular products include those corresponding to HTS subheadings 7306.11, 7306.21, 7306.40, and HTS statistical reporting numbers 7306.61.7030, and 7306.69.7030. Carbon and other alloy non-seamless steel tubular products include

those corresponding to HTS subheadings 7305, 7306.19, 7306.29, 7306.30, 7306.50, 7306.61.10, 7306.61.30, 7306.61.70.60, 7306.69.10, 7306.69.30, 7306.69.50, 7306.69.70.60, and 7306.90.

Oil country tubular goods—casing, tubing, and drill pipe, used in drilling for oil and gas. Can include seamless or non-seamless tubular products. Carbon and other alloy seamless oil country tubular goods correspond to HTS subheadings 7304.23 and 7304.29. Carbon and other alloy non-seamless oil country tubular goods correspond to HTS subheadings 7305.20 and 7306.29. In this questionnaire, stainless oil country tubular goods are not distinguished from other stainless tubular products.

On-site combustion—the consumption of fuel in stationary units operated by the facility to release thermal energy or generate electricity. Fuel use in on-site combustion consists of four categories: fuel consumed for on-site power generation, fuel consumed for on-site cogeneration, fuel consumed for on-site multipurpose boilers, and fuel consumed for all other on-site combustion. Note: for facilities reporting to the GHGRP note that you should only include fuel use reported in subparts C and D in your on-site combustion data in this questionnaire.

Operational control/operated—a company has operational control over a facility or process (it "operates" the facility/process) if the company or one of its subsidiaries has the full authority to introduce and implement its operating policies to the facility/process. A toll producer has operational control of a facility if it controls production, even if it does not own the inputs or outputs of that production.

Other carbonaceous materials—sources of carbon used in electric arc furnaces as a source of charge or injection carbon, other than coal and coal-based carbon additives. Other carbonaceous materials include biomass, charcoal, used tires, petroleum coke, and other coal alternatives.

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Parent company—a single company that has a controlling interest in another company or joint venture. A parent company can also be the ultimate owner.

Pig iron—the product of smelting iron ore, generally in a blast furnace, and can either be in liquid/molten or solid/cast form when consumed in steelmaking. The liquid form of pig iron is often referred to as "hot metal."

Portable—designed and capable of being carried or moved from one location to another. Indications of portability include but are not limited to wheels, skids, carrying handles, dolly, trailer, or platform. Equipment is not portable if any of the following conditions exists: 1) the equipment is attached to a foundation; 2) the equipment or a replacement resides at the same location for more than 12 consecutive months; 3) the equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least two years, and operates at that facility for at least three months each years; 4) the equipment is moved from one location to another in an attempt to circumvent the portable residence time requirements of this definition (40 C.F.R. § 98.6).

Process—processes include production lines, equipment, material preparation, or other aspects of production that make a product and carry it through its life cycle.

Process emissions—emissions from physical processes or chemical transformation of raw materials (e.g., through reduction of iron or aluminum smelting).

Processor—a facility that solely engages in light manufacturing processes that do not result in the transformation of covered products into different categories of covered products. Product categories for

covered steel and aluminum products are listed in question 1.2.3. Examples of processors are service centers that solely cut or slit steel or aluminum, facilities that solely thread tubular products, or facilities that lightly manufacture steel or aluminum prior to use in the production of downstream goods.

Produce/production—Production includes manufacturing processes that transform inputs and covered products into different categories of inputs and covered products. It can also include certain specific manufacturing processes that do not result in transformation of covered products into different categories: these are (1) the manufacturing of secondary unwrought aluminum from other forms of secondary unwrought aluminum and (2) heat treatment of steel products in a standalone facility. Other light manufacturing processes that occur in facilities where the above transformations occur are also considered production.

Purchased electricity—the power from electricity that consumers purchase from their utility service provider, direct-line connections not purchased through utility provider, or third-party cogeneration units.

Reducing agent/reductant—materials (reductants) added into a furnace to deoxidize (reduce) the iron ore to form metallic iron.

Rebar—steel concrete reinforcing bars and rods of carbon and other alloy steel, whether or not wound in irregular coils. Rebar corresponds to HTS subheadings 7213.10, 7214.20 and HTS statistical reporting number 7228.30.8010

Renewable energy certificate (REC)—a type of energy attribute certificate, a REC is a market-based instrument that represents the property rights to the environmental, social, and other non-power attributes of renewable electricity generation. A REC is issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource. The term "unbundled REC" means the non-physical REC has been separated from the physical electricity. The term "bundled REC" means the REC is sold with its associated physical electricity. REC retirement is registered in the tracking system that issued the REC and ensures that the REC cannot be sold to another entity.

Retail energy supplier (electric)—an entity that sells electricity in deregulated retail electricity markets. Retail energy suppliers set the rates and contract terms for their electricity customers and are responsible for sourcing the electricity from the wholesale market. Unlike a utility, retail energy suppliers do not control and maintain the distribution network that delivers the electricity.

Rotary hearth furnace—a direct-reduction device that recovers metals from iron fines and dust produced during ironmaking and steelmaking process to produce direct reduced iron or liquid pig iron from those recovered materials.

Scope 1 emissions—direct GHG emissions that occur from sources that are controlled by a facility, including process emissions and combustion emissions. Note: the Trade Representative's request specifies that this investigation will collect information to calculate scope 1 emissions that are associated with the production of covered steel and aluminum products in the United States.

Scope 2 emissions—indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. Although scope 2 emissions physically occur at the energy-generating plant where they are emitted, they are accounted for in a facility's GHG inventory because they are a result of the facility's energy use. Note: the Trade Representative's request specifies that this investigation will collect information to calculate scope 2 emissions that are associated with the production of covered steel and aluminum products in the United States.

Scope 3 emissions—indirect GHG emissions are the result of activities from assets not controlled by the reporting facility, but that the facility indirectly affects in its value chain. Scope 3 emissions include all sources not within a facility's scope 1 and 2 boundary. The scope 3 emissions for one facility are the scope 1 and 2 emissions of another facility. Note: the Trade Representative's request specifies that this investigation will collect information to calculate a specific subset scope 3 emissions that are associated with the upstream intermediate steel and aluminum inputs purchased from other sources and used in the production of covered steel and aluminum products in the United States.

Scrap, externally sourced—includes fabrication scrap (pre-consumer scrap from manufacturing processes), post-consumer scrap that has been recovered from end-of-life steel or aluminum containing products (e.g., recycling of steel from cars), and blended scrap (e.g., scrap produced by scrap processors through shredding, followed by chemical analysis and sort by alloy content and then blended to a customer's preferred alloy specifications). Externally sourced scrap can be sourced from other steel and aluminum producing facilities (regardless of common ownership) as well as downstream facilities.

Scrap, home—see runaround scrap.

Scrap, **post-consumer**—scrap recovered from end-of-life steel- or aluminum-containing products (e.g., cars, used beverage containers).

Scrap, **runaround**—also known as home scrap, internally generated scrap, internal scrap, turnaround scrap, or in-house scrap, is scrap generated within a facility and re-used as an input into the production processes at the same facility. The quantity of internal scrap does not usually affect the material balance sheet (raw material in and product out) of a facility.

Seamless steel tubular products—includes seamless tubes, pipes, and hollow profiles, but not fittings or other attachments. Stainless seamless steel tubular products include those corresponding to HTS subheadings 7304.11, 7304.22, 7304.24, 7304.41, and 7304.49. Carbon and other alloy seamless steel tubular products include those corresponding to HTS subheadings 7304.19, 7304.23, 7304.29, 7304.31, 7304.39, 7304.51, 7304.59, and 7304.90.

Semifinished/crude steel—includes ingots, blooms, slabs, billets, and beam blanks (whether batch or continuously cast), as well as liquid steel not cast into a form on-site. Stainless semifinished/crude steel includes products corresponding to HTS heading 7218. Carbon and other alloy semifinished/crude steel include products corresponding to HTS headings 7206, 7207, and 7224.

Slabs—semifinished/crude steel of rectangular cross section having a width measuring at least four times the thickness. Carbon and other alloy steel slabs are those corresponding to HTS statistical reporting numbers 7207.12.0050, 7207.20.0045, 7224.90.0025, 7224.90.0055. Stainless steel slabs are those corresponding to HTS statistical reporting number 7218.91.0060.

Slag—the by-product of iron and steel production in the blast furnace, basic oxygen furnace, or electric arc furnace. Slag contains fluxing materials like lime and the impurities drawn from the iron ore through the fluxing process.

Smelting (of primary unwrought aluminum)—the process by which alumina is extracted from its oxide to produce aluminum, by the Hall-Héroult electrolytic process.

Source country—the country where production of an input—steel, aluminum, or another material input—occurred.

Source facility—the producer of an input—steel, aluminum, or another material input.

Stainless steel—alloy steels containing, by weight, 1.2 percent or less of carbon and 10.5 percent or more of chromium, with or without other elements.

Steel—steel products that are covered under this investigation. Includes carbon, stainless, and other alloy semifinished/crude steel and downstream steel products, including flat and long steel products and steel tubular products. Note: for a full list of products covered in this investigation, see attachment B to the Trade Representative's letter requesting this investigation, which you can download <u>here</u>.

Steelmaking—the processes that convert pig iron, scrap, DRI/HBI, or mixtures of these into steel by a refining process that lowers the carbon content and removes impurities, mainly nonferrous metals, phosphorus, and sulfur. Steel is primarily produced using one of two methods: basic oxygen furnace or electric arc furnace.

Subpart C of Title 40 of the Code of Federal Regulations, Part 98 (subpart C)—refers to 40 C.F.R. §§ 98.30–98.38, which covers reporting requirements and calculation methodologies for emissions associated with general stationary combustion for fuel sources as defined in the regulation.

Subpart D of Title 40 of the Code of Federal Regulations, Part 98 (subpart D)—refers to 40 C.F.R. §§ 98.40–98.48, which covers reporting requirements and calculation methodologies for emissions associated with electricity generation as defined in the regulation.

Subpart F of Title 40 of the Code of Federal Regulations, Part 98 (subpart F)—refers to 40 C.F.R. §§ 98.60–98.68, which covers reporting requirements and calculation methodologies for emissions associated with primary aluminum production as defined in the regulation.

Subpart Q of Title 40 of the Code of Federal Regulations, Part 98 (subpart Q)—refers to 40 C.F.R. §§ 98.170–98.178, which covers reporting requirements and calculation methodologies for emissions associated with iron and steel production as defined in the regulation.

System boundary—a clearly defined scope of the GHG emissions meant to be covered when accounting for all GHG emissions associated with a specific product, facility, or company. This generally includes contiguous processes as well as pertinent product inputs along a value chain for which all associated GHG emissions should be captured—and excludes all others.

Tier 4—a greenhouse gas calculation methodology which relies on direct measurements from a CEMS. For examples of what this methodology looks like for stationary fuel combustion units under the GHGRP, see 40 C.F.R. § 98.33(a)(4).

Toll producer (toll production)—a facility that engages in the production of a product on behalf of another facility that owns the product before, during, and after production.

Used oil—petroleum-derived or synthetically derived oil whose physical properties have changed as a result of handling or use, such that the oil cannot be used for its original purpose. Used oil consists primarily of industrial oils (e.g., industrial engine oils, metalworking oils, process oils, industrial grease, etc.) and automotive oils (e.g., used motor oil, transmission oil, hydraulic fluids, brake fluid, etc.).

Useful thermal output—the thermal energy (e.g., steam, heat, hot water) made available in a cogeneration, a combined heat and power system, or a boiler for use in any industrial or commercial process, heating or cooling application, or delivered to other end users. This only includes the thermal energy that are available for processes and applications other than electrical generation.

Utility (electric)—a corporation, person, agency, authority, or other legal entity aligned with distribution facilities to deliver electric energy for use primarily by the public. Included are investor-owned electric utilities, municipal and state utilities, federal electric utilities, and rural electric cooperatives. In an

electricity market with no deregulation, utilities own and operate all aspects of the electric system, including power plants, transmission and distribution systems. In an electricity market where the retail segment has been deregulated, customers may instead purchase electricity from a retail energy supplier.

Wire, steel—steel wire, whether or not plated, coated, or polished, of any cross-sectional dimension and shape. Carbon and other alloy steel wire corresponds with HTS headings 7217 and 7229. Stainless steel wire corresponds with the HTS heading 7223.

Wire rod—a hot-rolled intermediate steel product of circular or approximately circular cross section that typically is produced in nominal fractional diameters up to 19 millimeters and sold in irregularly wound coils, primarily for subsequent drawing and finishing by wire drawers. Carbon and other alloy wire rod corresponds to HTS subheading 7213.91 and HTS statistical reporting numbers 7213.99.0030, 7213.99.0090, and 7227.20.0030, 7227.90.6020, 7227.90.6030, and 7227.90.6035. In this questionnaire, stainless wire rod is not distinguished from other stainless hot-worked long steel products.

SECTION 1. Facility Information

This questionnaire collects data at the <u>facility</u> level. For your facility, enter the 10-character questionnaire token in the email sent to this facility's contact person. This will allow our project team to track your response. If you cannot locate this token, contact our project team at <u>sa.emissions@usitc.gov</u>.

Facility's questionnaire token: _____

Section 1.1 Company-reported Information

[*Presented once token is entered and accepted*] [COMPANY NAME] submitted the below information for your facility and specified that your facility produced <u>covered steel or aluminum products</u> in 2022. If your facility is not associated with this company, or any of the information below is incorrect, contact the project team at <u>sa.emissions@usitc.gov</u>.

| Company name | {information piped in from company-level questionnaire} |
|---|---|
| Facility name | {information piped in from company-level questionnaire} |
| Facility address (street, city, state) | {information piped in from company-level questionnaire} |
| Facility zip code | {information piped in from company-level questionnaire} |
| Facility contact person's name | {information piped in from company-level questionnaire} |
| Facility contact person's email address | {information piped in from company-level questionnaire} |
| Facility contact person's phone number | {information piped in from company-level questionnaire} |
| GHGRP ID | {information piped in from company-level questionnaire} |

Section 1.2 Facility Information

- **1.2.1.** Did your <u>facility</u> produce any <u>covered steel or aluminum products</u> in calendar year 2022? Include output (even if part of a continuous production line) that was used by your facility in the production of other products, even if those other products were not covered products.
 - Covered <u>steel</u> products include carbon, stainless, and other alloy semifinished/crude steel and downstream steel products including flat and long steel products (including steel wire) and steel tubular products.
 - Covered <u>aluminum</u> products include unwrought aluminum, whether alloyed or unalloyed, and wrought aluminum bars, rods, profiles, wire, plates, sheets, strip, foil, tubes, pipes, pipe and tube fittings, castings, and forgings.
 - □ Steel
 - □ Aluminum
 - None of the above

[If none of the above, respondent will be skipped to Section 8: Certification, certify and submit their response, and their response will be flagged for follow-up by the team.]

- 1.2.2. Did your facility use any of the following types of manufacturing processes in 2022 (check all that apply)?
 - [If responding yes to Aluminum in Q1.2.1]
 - □ <u>Primary unwrought aluminum</u> production
 - □ <u>Secondary unwrought aluminum</u> production
 - □ <u>Wrought aluminum</u> production (includes production of aluminum bars, rods, profiles, wire, plates, sheets, strip, foil, tubes, pipes, pipe and tube fittings, castings, and forgings)
 - [If responding yes to Steel in Q1.2.1]
 - □ Steel production using an <u>electric arc furnace (EAF)</u>
 - □ Steel production using a <u>blast furnace (BF)</u> and <u>basic oxygen furnace (BOF)</u>
 - Downstream steel product manufacturing using an intermediate steel input (includes production of flat, long, or tubular steel products)
- 1.2.3. Indicate the products (including steel, aluminum, materials, and any other products) produced at this facility (check all that apply).
 - Do not include any production from on-site processes not under your facility's <u>operational</u> <u>control</u>.
 - Include output (even if part of a continuous production line) that was used by your facility in the production of other products as well as products that were sold or transferred to other facilities or customers.
 - Also include products that your facility further manufactured from inputs received from other facilities.

[Applicable list of covered products from analysis product categories will be displayed according to the facility's response to Q1.2.1]

[If responding yes to Steel in Q1.2.1]

Materials:

- □ <u>Metallurgical coke</u> (including coke breeze)
- □ Calcined <u>lime</u> or <u>dolime</u>
- □ <u>Iron sinter</u>
- Oxygen
- □ Argon
- Nitrogen
- □ Hydrogen
- Pig iron, including solid and liquid (i.e., hot metal) pig iron

<u>Stainless steel</u> (includes alloy steels containing, by weight, 1.2 percent or less of carbon and 10.5 percent or more of chromium, with or without other elements):

- Stainless <u>semifinished/crude steel</u>: includes ingots, blooms, slabs, billets, and beam blanks (whether batch or continuously cast), as well as liquid steel not cast into a semifinished form on-site.
- Stainless <u>hot-rolled flat steel products</u>: includes hot-rolled sheets, strips, and plates, whether or not annealed, pickled, or tempered, in either coils or cut lengths, not cold-rolled nor clad, plated, or coated with metal.
- Stainless <u>cold-rolled flat steel products</u>: includes cold-rolled sheets, strips, and plates, whether or not annealed, pickled, tempered, cold-reduced, clad, plated, or coated, in either coils or cut lengths.
- □ **Stainless** <u>seamless</u> <u>steel tubular products</u>: includes seamless tubes, pipes, and hollow profiles, but not fittings or other attachments.
- □ **Stainless** <u>non-seamless</u> <u>steel tubular products</u>: includes non-seamless tubes, pipes, and hollow profiles, but not fittings or other attachments.
- Stainless <u>hot-worked long steel products</u>: includes hot-rolled, hot-drawn, hot-extruded, or hot-forged bars, concrete reinforcing bars, structural shapes (angles, shapes, and sections), and wire rods, not cold-formed, cold-finished, or cold-drawn.
- Stainless <u>cold-formed/finished long steel products</u>: includes cold-formed, cold-finished, or cold-drawn bars, whether or not coated with metallic or nonmetallic materials. Also includes all stainless <u>steel wire</u>.

<u>Carbon and other alloy steel</u>: all steels other than stainless steel (including nonalloy steel, low-alloy steel, silicon electrical steel, high-speed steel, silicomanganese steel, tool steel, chipper-knife steel, heat-resisting steel, ball-bearing steel, etc.):

- Carbon and other alloy <u>semifinished/crude steel</u>: includes ingots, blooms, slabs, billets, and beam blanks (whether batch or continuously cast), as well as liquid steel not cast into a semifinished form on-site.
- Carbon and other alloy <u>hot-rolled flat steel products</u>: includes hot-rolled sheets, strips, and plates, whether or not annealed, pickled, or tempered, in either coils or cut lengths, not cold-rolled nor clad, plated, or coated with metal.
- Carbon and other alloy <u>cold-rolled flat steel products</u>: includes cold-rolled sheets, strips, and plates, whether or not annealed, pickled, tempered, or cold-reduced, in either coils or cut lengths, not clad, plated, or coated with metal.
- Carbon and other alloy coated flat steel products: includes steel sheets, strips, and plates that have been clad, plated, or coated with metal, in either coils or cut lengths. Examples include flat steel products that are hot-dipped or electrolytically galvanized; or those coated with Galvalume, tin or chromium (tin-free), or other metals.
- □ **Carbon and other alloy** <u>seamless tubular steel products</u>: includes seamless tubes, pipes, and hollow profiles, but not fittings, other attachments.
- □ **Carbon and other alloy** <u>non-seamless tubular steel products</u>: includes non-seamless tubes, pipes, and hollow profiles, but not fittings and other attachments.
- Carbon and other alloy <u>hot-worked long steel products</u>: includes hot-rolled, hot-drawn, hot-extruded, or hot-forged bars, concrete reinforcing bars, structural shapes (angles, shapes, sections, and sheet pilings), rails, and wire rods, not cold-formed, cold-finished, or cold-drawn.

□ **Carbon and other alloy <u>cold-formed/finished long steel products</u>: includes cold-formed, cold-finished, or cold-drawn bars, whether or not coated with metallic or nonmetallic materials (e.g., plastics, paint, etc.). Also includes all carbon and other alloy steel wire.**

Other products:

Products other than those described above: includes products that are not covered steel products or inputs to those covered products described above. Examples include products made primarily of metals that are not steel (e.g., titanium) or finished products made from steel but not included among covered steel products defined above (e.g., cable, wire mesh).

[If responding yes to Aluminum in Q 1.2.1] [If responding yes to primary unwrought aluminum production in Q 1.2.2]

Materials:

<u>Carbon anodes</u>: a carbon block used to conduct electricity. Anodes are inserted into an aluminum pot during the primary aluminum smelting process.

Aluminum products:

[If responding yes to primary unwrought aluminum production in Q 1.2.2]

Primary unwrought aluminum: includes aluminum (either pure or subsequently alloyed) produced directly from the electrolytic smelting of alumina, typically at a primary smelter. This term does not encompass rolled, forged, drawn, or extruded products, tubular products, or cast or sintered forms that have been machined or processed, other than by simple trimming, scalping, or descaling. Includes forms such as ingots, slabs, billets, sows, liquid, etc.

[If responding yes to secondary unwrought aluminum production in Q 1.2.2]

Secondary unwrought aluminum: includes aluminum and aluminum alloys produced by melting down aluminum scrap or a combination of aluminum scrap and primary aluminum or by recovering aluminum from dross. This term does not encompass rolled, forged, drawn, or extruded products, tubular products, or cast or sintered forms that have been machined or processed, other than by simple trimming, scalping, or descaling. Includes forms such as ingots, slabs, billets, sows, liquid, etc.

[If responding yes to wrought aluminum production in Q 1.2.2]

- Bars, rods, and profiles: includes wrought products with a solid cross section, typically produced via extrusion. Aluminum rods have a solid circular-cross section; bars can have a number of flat sides. Profiles, also referred to as "shapes" or "sections" have various cross-sectional shapes that differ from those of other wrought products.
- Wire: includes wire produced by drawing unwrought wire rod through one or more steel dies to attain the desired final outside dimensions. Wires do not exceed 10.0 millimeters in maximum diameter.

- Plates, sheets, and strip: includes flat-rolled aluminum products. Plates are at least 6.0 millimeters thick (6.3 millimeters in the United States), and are cut to length. Sheets are between 0.20 millimeters to under 6.3 millimeters thick (0.15 millimeters to under 6.3 millimeters in the United States). Strip is slit from coiled aluminum into narrower widths than the original coil.
- □ **Foil:** includes flat-rolled aluminum of thickness not exceeding 0.20 millimeters.
- Tubes and pipes: includes hollow wrought aluminum products. Tubes have uniform wall thicknesses along their length. Pipes are a type of tube with standardized outside diameter and wall thicknesses.
- □ **<u>Tube and pipe fittings</u>**: includes aluminum products such as couplings, elbows, and sleeves.
- <u>Castings</u>: includes the solid, rough, finished, or near-finished (near-net) aluminum shapes resulting from the foundry or die-casting processes.
- □ **Forgings:** includes mechanically worked (formed) products made by applying pressure to shape unwrought aluminum using either open or closed dies.

Other products:

- Products other than those described above: includes products that are not covered aluminum products or inputs to those covered products described above. Examples include products made primarily of metals that are not aluminum (e.g., titanium) or finished products made from aluminum but not included among covered aluminum products defined above (e.g., cable).
- 1.2.4. This questionnaire asks you to report quantities of materials based on their weight/mass. For measurements involving solid materials, which unit would you like to use to report your facility's quantity data? Provide the data in the unit you choose below for the remainder of the questionnaire unless explicitly stated otherwise.
 - Metric ton (2,204.62 pounds or 1,000 kg)
 - Short ton (2,000 pounds or 907.185 kg)

SECTION 2. U.S. Production of Steel and Aluminum

As with the entirety of your response, answers to the questions in this section will be treated as confidential business information. To download a copy of our confidentiality statement, click <u>here</u>.

Section 2.1 U.S. Production of Covered Steel Products and Their Inputs

[If responding yes to steel in Q1.2.1]

- 2.1.1 Report your facility's <u>production</u> in 2022 of any of the following materials or products. Do not include any production from on-site processes not under your facility's <u>operational control</u>. Report production under the following two categories:
 - **Production for shipment to customers or other facilities (regardless of common ownership)** includes production for merchant sales, transfers to facilities under common ownership, shipments of products to another facility for additional toll production, or shipments following your own facility's toll production to the facility that owns the products.
 - **Production for use in the same facility** includes any output, even if part of a continuous production line, that is used by your facility in the production of other product categories. (If your facility produced covered steel or upstream materials, it should also report the downstream production that used those inputs in additional rows. This may result in the mass of steel and upstream materials being counted multiple times).

Report all production quantities in {metric tons/short tons} for all materials/product types except oxygen, argon, nitrogen, and hydrogen which should be measured in standard cubic feet.

| Material/product type | Quantity of production for shipment to customers or other facilities (regardless of common ownership) ({metric tons/short tons}) | Quantity of production for use in the same facility ({metric tons/short tons}) |
|--|--|---|
| Metallurgical coke (including coke breeze) | | |
| Calcined lime | | |
| Calcined dolime | | |
| Iron sinter (including fines from sinter plants) | | |
| Oxygen (measured in standard cubic feet) | | |
| Argon (measured in standard cubic feet) | | |
| Nitrogen (measured in standard cubic feet) | | |
| Hydrogen (measured in standard cubic feet) | | |
| Pig iron, including solid and liquid (i.e., hot metal) pig | | |
| iron | | |
| Stainless semifinished/crude steel | | |
| Stainless hot-rolled flat steel products | | |
| Stainless cold-rolled flat steel products | | |
| Stainless seamless steel tubular products | | |
| Stainless non-seamless steel tubular products | | |
| Stainless hot-worked long steel products | | |
| Stainless cold-formed/finished long steel products | | |
| Carbon and other alloy semifinished/crude steel | | |
| Carbon and other alloy hot-rolled flat steel products | | |
| Carbon and other alloy cold-rolled flat steel products | | |
| Carbon and other alloy coated flat steel products | | |
| Carbon and other alloy seamless tubular steel products | | |
| Carbon and other alloy non-seamless tubular steel | | |
| products | | |
| Carbon and other alloy hot-worked long steel products | | |
| Carbon and other alloy cold-formed/finished long steel | | |
| products | | |
| Products other than those described above: includes | | |
| products that are not covered steel products under this | | |
| investigation, such as products made primarily of | | |
| metals that are not steel (e.g., titanium), or finished | | |
| products made from steel inputs but not included | | |
| among covered steel products defined above (e.g., | | |
| cable, wire mesh) (specify): | | |

2.1.2 [*If any quantity reported in question 2.1.1 under stainless semifinished/crude steel category*] Report your facility's <u>production</u> in 2022 of **stainless <u>semifinished/crude steel</u>** in 2022, by product type. Include all production, including for use in the same facility or for shipment to customers or other facilities (regardless of common ownership). In question 2.1.1, you indicated production of {XXX} {units} [*piped from Q2.1.1*] of **stainless semifinished/crude steel**. The total in the table below should equal this amount.

| | Quantity of production ({metric |
|--|---------------------------------|
| Type of stainless semifinished/crude steel | tons/short tons}) |
| Ingots and steel in other primary forms | |
| Slabs (including batch and continuously cast) | |
| All other forms of semifinished/crude steel (including blooms, | |
| billets, and beam blanks, whether batch or continuously cast) | |
| Total | auto calculated |

2.1.3 [If any quantity reported in question 2.1.1 under carbon and other alloy semifinished/crude steel category] Report your facility's production in 2022 of carbon and other alloy semifinished/crude steel in 2022, by product type. Include all production, including for use in the same facility or for shipment to customers or other facilities (regardless of common ownership).

In question 2.1.1, you indicated production of {XXX} {units} [*piped from Q2.1.1*] of **carbon and other alloy semifinished/crude steel**. The total in the table below should equal this amount.

| | Quantity of production ({metric |
|--|---------------------------------|
| Type of carbon and other alloy semifinished/crude steel | tons/short tons}) |
| Ingots and steel in other primary forms | |
| Slabs (including batch and continuously cast) | |
| All other forms of semifinished/crude steel (including blooms, | |
| billets, and beam blanks, whether batch or continuously cast) | |
| Total | auto calculated |

2.1.4 [If any quantity reported in question 2.1.1 under carbon and other alloy hot-rolled flat steel category] Report your facility's production in 2022 of carbon and other alloy hot-rolled flat steel products in 2022, by product type. Include all production, including for use in the same facility or for shipment to customers or other facilities (regardless of common ownership).

In question 2.1.1, you indicated production of {XXX} {units} [*piped from Q2.1.1*] of **carbon and other alloy hot-rolled flat steel products**. The total in the table below should equal this amount.

| Type of carbon and other alloy hot-rolled flat steel | Quantity of production ({metric tons/short tons}) |
|--|--|
| Hot-rolled plate (thickness of 4.75 millimeters or more), whether in coils | |
| or cut to length | |
| All other hot-rolled flat steel products (thickness of less than 4.75 | |
| millimeters) | |
| Total | auto calculated |

2.1.5 [If any quantity reported in question 2.1.1 under carbon and other alloy hot-worked long steel category] Report your facility's production in 2022 of carbon and other alloy hot-worked long steel products in 2022, by product type. Include all production, including for use in the same facility or for shipment to customers or other facilities (regardless of common ownership).

In question 2.1.1, you indicated production of {XXX} {units} [*piped from Q2.1.1*] of **carbon and other alloy hot-worked long steel products**. The total in the table below should equal this amount.

| Type of carbon and other alloy hot-worked long steel | Quantity of production ({metric tons/short tons}) |
|--|--|
| | |
| <u>Rebar</u> | |
| <u>Wire rod</u> | |
| Heavy structural shapes and sheet piling | |
| All other hot-worked long steel products | |
| Total | auto calculated |

2.1.6 [If any quantity reported in question 2.1.1 under stainless cold-formed/finished long steel category] Report your facility's production in 2022 of stainless cold-formed/finished long steel products in 2022, by product type. Include all production, including for use in the same facility or for shipment to customers or other facilities (regardless of common ownership).

In question 2.1.1, you indicated production of {XXX} {units} [*piped from Q2.1.1*] of **stainless cold-formed/finished long steel products**. The total in the table below should equal this amount.

| | Quantity of production ({metric |
|--|---------------------------------|
| Type of stainless cold-formed/finished long steel | tons/short tons}) |
| Wire | |
| All other cold-formed/finished long steel products | |
| Total | auto calculated |

2.1.7 [If any quantity reported in question 2.1.1 under carbon and other alloy cold-formed/finished long steel category] Report your facility's production in 2022 of carbon and other alloy cold-formed/finished long steel products in 2022, by product type. Include all production, including for use in the same facility or for shipment to customers or other facilities (regardless of common ownership).

In question 2.1.1, you indicated production of {XXX} {units} [*piped from Q2.1.1*] of **carbon and other alloy cold-formed/finished long steel products**. The total in the table below should equal this amount.

| Type of carbon and other alloy cold-formed/finished long steel | Quantity of production ({metric tons/short tons}) |
|--|--|
| Wire | |
| All other cold-formed/finished long steel products | |
| Total | auto calculated |

2.1.8 [If any quantity reported in question 2.1.1 under carbon and other alloy seamless tubular products] Report your facility's production in 2022 of carbon and other alloy seamless steel tubular products in 2022, by product type. Include all production, including for use in the same facility or for shipment to customers or other facilities (regardless of common ownership).

In question 2.1.1, you indicated production of {XXX} {units} [*piped from Q2.1.1*] of **carbon and other alloy seamless steel tubular products**. The total in the table below should equal this amount.

| Type of carbon and other alloy seamless steel tubular | Quantity of production ({metric |
|---|---------------------------------|
| products | tons/short tons}) |
| Seamless oil country tubular goods | |
| All other seamless steel tubular products | |
| Total | auto calculated |

2.1.9 [If any quantity reported in question 2.1.1 under carbon and other alloy non-seamless tubular products] Report your facility's production in 2022 of carbon and other alloy non-seamless steel tubular products in 2022, by product type. Include all production, including for use in the same facility or for shipment to customers or other facilities (regardless of common ownership).

In question 2.1.1, you indicated production of {XXX} {units} [*piped from Q2.1.1*] of **carbon and other alloy non-seamless steel tubular products**. The total in the table below should equal this amount.

| Type of carbon and other alloy non-seamless steel tubular products | Quantity of production ({metric tons/short tons}) |
|--|--|
| Non-seamless oil country tubular goods | |
| All other non-seamless steel tubular products | |
| Total | auto calculated |

2.1.10 [*If in Q2.1.1, the quantity of metallurgical coke production is nonzero*] Report your facility's production, shipments, and receipts of <u>coke oven gas</u> in 2022.

| Type of production/shipments/receipts of coke oven gas | Quantity (in standard cubic feet) |
|---|-----------------------------------|
| Coke oven gas produced by your facility for shipment to | |
| other facilities (including if sent to an on-site generation unit | |
| operated by a third party) | |

| Coke oven gas produced by your facility and <u>combusted</u> or | |
|---|--|
| <u>flared</u> at your facility | |
| Coke oven gas produced elsewhere and shipped to your | |
| facility for <u>combustion</u> or <u>flaring</u> | |

2.1.11 [*If steel production using a blast furnace (BF) checked for 1.2.2*] Report your facility's production, shipments, and receipts of **blast furnace gas** in 2022.

| Type of production/shipments/receipts of blast furnace gas | Quantity (in standard cubic feet) |
|---|-----------------------------------|
| Blast furnace gas produced by your facility for shipment to | |
| other facilities (including if sent to an on-site generation unit | |
| operated by a third party) | |
| Blast furnace gas produced by your facility and <u>combusted</u> | |
| or <u>flared</u> at your facility | |
| Blast furnace gas produced elsewhere and shipped to your | |
| facility for <u>combustion</u> or <u>flaring</u> | |

Section 2.2 U.S. Production of Covered Aluminum Products and Their Inputs

Primary unwrought aluminum production

[If responding yes in Q1.2.2 to primary unwrought aluminum production]

- 2.2.1 Report your facility's <u>production</u> in 2022 of any of the following materials or products. Do not include any production from on-site processes not under your facility's <u>operational control</u>. Report production under the following two categories:
 - Production for shipment to customers or other facilities (regardless of common ownership) includes production for merchant sales and transfers to facilities under common ownership.
 - **Production for use in the same facility** includes any output, even if part of a continuous production line, that is used by your facility in the production of other product categories.

| | Quantity of production for shipment to customers or other facilities (regardless of | Quantity of production for <i>use in</i> the same facility |
|---|---|--|
| | common ownership) | ({metric tons/short |
| Material/product type | ({metric tons/short tons}) | tons}) |
| Primary unwrought aluminum (e.g., ingots, | | |
| billets, slabs, wire rods) | | |
| Carbon anodes | | |
| Products other than those described in the | | |
| above rows, including products that are not | | |
| covered aluminum products under this | | |
| investigation (specify): | | |

Secondary unwrought aluminum production

[If responding yes in Q1.2.2, to secondary unwrought aluminum production and no to wrought aluminum production]

2.2.2 Report your facility's <u>production</u> in 2022 of any of the following materials or products. Do not include any production from on-site processes not under your facility's <u>operational control</u>. If secondary unwrought aluminum is used in the same facility to make a product that is not covered under this investigation, please report the internally consumed secondary unwrought aluminum in the first row as if it is production **for shipment**.

| | Quantity of production for <i>shipment to</i> <i>customers or other facilities</i> (regardless of common ownership) ({metric |
|--|--|
| Material/product type | tons/short tons}) |
| Secondary unwrought aluminum (e.g., ingots, billets, | |
| slabs, sows, remelt scrap ingot (RSI)) | |
| Products other than secondary unwrought aluminum, | |
| including products that are not covered aluminum | |
| products under this investigation (specify): | |

Wrought aluminum production

[If responding yes in Q1.2.2, to wrought aluminum production **or** both secondary unwrought aluminum production and wrought aluminum production]

2.2.3

- Report your facility's <u>production</u> in 2022 of any of the following materials or products. Do not include any production from on-site processes not under your facility's <u>operational control</u>. Report production under the following two categories:
 - **Production for shipment to customers or other facilities (regardless of common ownership)** includes production for merchant sales and transfers to facilities under common ownership.
 - **Production for use in the same facility** includes any output, even if part of a continuous production line, that is used by your facility in the production of other product categories.

| Product type | Quantity of production for <i>shipment</i> <i>to customers or other facilities</i> (regardless of common ownership) ({metric tons/short tons}) | Quantity of production for <i>use in the same</i> <i>facility</i> ({metric tons/short tons}) |
|---|---|---|
| Secondary unwrought aluminum (e.g., ingots, billets, slabs, sows, remelt scrap ingot (RSI)) | | |

b. Report your facility's production in 2022 of any of the following materials or products. Do not include any production from on-site processes not under your facility's <u>operational control</u>. Report production regardless of whether the product is shipped to other facilities or customers or used by your facility in the production of other product categories. For wrought aluminum products, report production according to the final form of covered wrought aluminum product type that was produced in the facility (e.g., if your facility produced aluminum sheet that was used to produce aluminum foil, then report that production under the row for aluminum foil only). Report production of non-covered products only if those goods were not made from your facility's own production of covered wrought aluminum.

| Product type | Quantity of production ({metric tons/short tons}) |
|--|--|
| Bars, rods, profiles | |
| Wire | |
| Plates, sheets, strip | |
| Foil | |
| Tubes, pipes, pipe and tube fittings | |
| Castings | |
| <u>Forgings</u> | |
| Products other than those described in the above rows, including | |
| products that are not covered in this investigation (specify): | |

SECTION 3. Fuel Combustion and Energy Allocation

You may note any uncertainties about information in this section in question 3.13. As with the entirety of your response, answers to the questions in this section will be treated as confidential business information. To download a copy of our confidentiality statement, click <u>here</u>.

- 3.1 Does this facility have on-site electricity generation or on-site, nonelectric boiler(s) that generate steam, heat, and/or hot water for use in multiple applications? Exclude any generation or boiler unit operated by a third party and any <u>emergency generators</u>. If your facility has a combination of <u>cogeneration</u> units, units solely generating electric power, or boiler units, check all boxes that apply.
 - □ Cogeneration
 - □ Power generation
 - □ Nonelectric boiler(s) used for multiple applications
 - □ None of the above

3.2

- a. Did your facility **receive** any steam, heat, or hot water as <u>useful thermal output</u> from third-partyoperated cogeneration or boiler units in 2022? (select all that apply)
 - □ Steam
 - □ Heat
 - $\ \ \, \square \quad Hot water$
 - $\hfill\square \quad None of the above$
- b. [*If cogeneration or nonelectric boiler(s) checked in Q3.1*] Which of the following <u>useful thermal</u> <u>outputs</u> was **generated** by the facility's cogeneration and/or nonelectric boiler units in 2022?
 - □ Steam
 - □ Heat
 - Hot water
 - No useful thermal output from cogeneration and boiler units
- c. [*If steam checked in Q3.2a or Q3.2b*] Select preferred units to report the **steam** that your facility generated and/or received in 2022.
 - o Megawatt-hours required to generate the steam
 - Gigajoules of steam output generated/received
 - o Million British thermal units of steam output generated/received
- d. [*If heat checked in Q3.2a or Q3.2b*] Select preferred units to report the **heat** that your facility generated and/or received in 2022.
 - Megawatt-hours required to generate the heat
 - Gigajoules of heat output generated/received
 - \circ Million British thermal units of heat output generated/received
- e. [*If hot water checked in Q3.2a or Q3.2b*] Select preferred units to report the **hot water** that your facility generated and/or received in 2022.

- o Megawatt-hours required to generate the hot water
- Gigajoules of hot water output generated/received
- \circ $\,$ Million British thermal units of hot water output generated/received $\,$

3.3

a. [*If cogeneration, power generation, and/or nonelectric boiler(s) checked in Q3.1*] Report the net energy outputs in 2022 from the unit(s) listed below, excluding energy generated by units operated by a third party and <u>emergency generators</u>.

| Type of generation | Units | Quantity |
|--|--------------------|----------|
| [If cogeneration checked in Q3.1] Electricity generated | megawatt-hours | |
| by facility-operated cogeneration units | | |
| [If power generation checked in Q3.1] Electricity | megawatt-hours | |
| generated by facility-operated power generation units | | |
| [If cogeneration checked in Q3.1 and steam checked in | [units selected in | |
| Q3.2b] Steam generated as useful thermal output by | 3.2c] | |
| facility-operated cogeneration units | | |
| [If cogeneration checked in Q3.1 and heat checked in | [units selected in | |
| Q3.2b] Heat generated as useful thermal output by | 3.2d] | |
| facility-operated cogeneration units | | |
| [If cogeneration checked in Q3.1 and hot water | [units selected in | |
| checked in Q3.2b] Hot water generated as useful | 3.2e] | |
| thermal output by facility-operated cogeneration units | | |
| [If nonelectric boiler(s) checked in Q3.1 and steam | [units selected in | |
| checked in Q3.2b] Steam generated as useful thermal | 3.2c] | |
| output by facility-operated, nonelectric boiler units | | |
| used for multiple applications | | |
| [If nonelectric boiler(s) checked in Q3.1 and heat | [units selected in | |
| checked in Q3.2b] Heat generated as useful thermal | 3.2d] | |
| output by facility-operated, nonelectric boiler units | | |
| used for multiple applications | | |
| [If nonelectric boiler(s) checked in Q3.1 and hot water | [units selected in | |
| checked in Q3.2b] Hot water generated as useful | 3.2e] | |
| thermal output by facility-operated, nonelectric boiler | | |
| units used for multiple applications | | |

b. [*If steam, heat, or hot water is checked in Q3.2a*] Report the <u>useful thermal outputs</u> that your facility received from third-party-operated cogeneration or boiler units in 2022.

| Type of thermal output received | Units | Quantity |
|---|--------------------------|----------|
| [If steam is checked in Q3.2a] Steam your | [units selected in 3.2c] | |
| facility received from a third-party supplier | | |
| [If heat is checked in Q3.2a] Heat your | [units selected in 3.2d] | |
| facility received from a third-party supplier | | |
| [If hot water is checked in Q3.2a] Hot water | [units selected in 3.2e] | |
| your facility received from a third-party | | |
| supplier | | |

 c. [If cogeneration checked in Q3.1] Provide the EIA/ORIS plant code for the onsite cogeneration units, if they have one (you can look this up using EIA's Electricity Data Browser; scroll below the map and use the filter/order button above the table to search or filter by sector, state, and fuel type). ______

3.4

- a. [If power generation and/or cogeneration checked in Q3.1] How many renewable energy certificates (RECs) were issued to your facility's on-site generation units for 2022, in megawatthours? This quantity must be less than or equal to the total reported electricity generation at the facility [piped electricity total from 3.3a MWh].
- b. [*If in Q3.4a, RECs generated are greater than zero*] How many of these **certificates** did you sell to other entities in 2022, in megawatt-hours? This quantity must be less than or equal to the total reported RECs issued to the facility [piped value from 3.4a]._____
- c. [If steam is checked in Q3.2b] How much steam generated as useful thermal output did you sell or transfer to other facilities in 2022, in [units selected in 3.2c]? This quantity must be less than or equal to the total reported steam output at the facility [piped steam total from 3.3a and units] ______
- *d.* [*If heat is checked in Q3.2b*] How much **heat** generated as <u>useful thermal output</u> did you sell or transfer to other facilities in 2022, in [units selected in 3.2d]? This quantity must be less than or equal to the total reported heat output at the facility [piped heat total from 3.3a and units]
- e. [If hot water is checked in Q3.2b] How much hot water generated as <u>useful thermal output</u> did you sell or transfer to other facilities in 2022, in [units selected in 3.2e]? This quantity must be less than or equal to the total reported hot water output at the facility [piped hot water total from 3.3a and units] _____
- 3.5 Indicate the fuel types that your facility used for on-site combustion in stationary units in 2022, excluding any fuel type used exclusively in <u>portable</u> equipment, <u>emergency equipment</u>, and <u>emergency generators</u>. Include fuel types used in both process-specific and facility-wide (e.g., HVAC) stationary combustion units.

Steel producers, do not check bituminous coal, coal coke, or natural gas if that fuel type **only** generated emissions that were reported to the Greenhouse Gas Reporting Program (<u>GHGRP</u>) under subpart Q or was **only** used as a feedstock material, such as a reducing agent, foaming agent, or cooling agent.

| Fuel type | Check to report |
|---|-----------------|
| Natural gas measured in standard cubic feet | |
| Natural gas measured in therms | |

| Natural gas measured in million British thermal units | |
|--|--|
| Bituminous coal ({metric tons/short tons}) | |
| [Steel only] Coal coke ({metric tons/short tons}) | |
| Distillate fuel oil no. 2 (gallons) | |
| Heavy gas oils (gallons) | |
| Kerosene (gallons) | |
| Liquefied petroleum gases (LPG) (gallons) | |
| Motor gasoline (gallons) | |
| Other oil (>401 degrees F) (gallons) | |
| Propane, gaseous (standard cubic feet) | |
| Propane, liquid (gallons) | |
| Propylene (gallons) | |
| Residual fuel oil no. 6 (gallons) | |
| Used oil (gallons) | |
| [Steel only] Blast furnace gas (standard cubic feet) | |
| [Steel only] Coke oven gas (standard cubic feet) | |
| Other fuel (specify the fuel type and the units of measure used): | |
| No on-site fuel combustion in stationary equipment at the facility (except for fuel used in portable equipment, emergency equipment, and emergency generators) | |

- 3.6 [*If "no on-site fuel combustion" is not checked in 3.5*] Report the quantity of your facility's **fuel use for on-site combustion in all stationary units in 2022**, for each fuel type that was used. This should include fuel used in any on-site electricity, cogeneration, and boiler units that are <u>operated</u> by your facility as well as all other on-site fuel combustion.
 - If your facility is a GHGRP reporter, report the fuel combustion quantities used to calculate subparts C and D emissions (if any of these emissions were reported using Tier 4, report the fuel quantities associated with the emissions). **Do not include** fuel use that generated emissions reported under subpart Q or fuel combustion excluded from subpart C and D reporting guidelines, such as fuel use in <u>portable</u> equipment, <u>emergency equipment</u>, or <u>emergency generators</u>.
 - Steel producers, do not include the quantity of coal, coke, and natural gas used in stationary units as a feedstock material, such as fuel used as a reducing agent (a source of carbon), foaming agent, or cooling agent. This information is collected in section 5.
 - If you are not a GHGRP reporter and your facility did not produce or recycle any of the fuel being reported, consumption data may be based on the quantity of fuel purchased in 2022.

| Fuel type | Quantity of fuel used for on-site combustion |
|---|--|
| {Fuel types selected in Q3.5 will be shown as rows in this table} | |
| | |
| | |

3.7 [If "no on-site fuel combustion" is not checked in 3.5, and if cogeneration, power generation, and/or boilers are checked for Q3.1.] Report your facility's fuel use associated with on-site fuel combustion in 2022 for on-site power generation, on-site cogeneration, on-site nonelectric multipurpose boilers, and all other on-site combustion. The total for each row should match the quantity of fuel used for on-site combustion reported in question 3.6.

Steel producers, if your facility is a GHGRP reporter, do not report fuel use that generated emissions reported under subpart Q.

| Fuel type | Quantity used for on-site power generation (excluding cogeneration) | Quantity used for on-site cogeneration | Quantity used for on-site nonelectric multipurpose boilers | Quantity used for all other on-site combustion | Total |
|--|--|--|--|---|--------------------|
| {Fuel types selected in Q3.5 will be shown as rows in this table} | | | | | Auto calculated |
| | | | | | |

3.8 [If "no on-site fuel combustion" is not checked in 3.5] Report your facility's quantity of fuel

combustion (excluding fuel used for on-site power generation, on-site <u>cogeneration</u>, and in on-site multipurpose boilers) associated with each process and fuel type in 2022. Process-specific quantities should be estimated when measured quantities are not available. The total of each column should match the **quantity used for all other on-site fuel combustion** for that fuel type in question 3.7; if you were not asked to answer question 3.7, it should match the quantity of fuel used for on-site combustion reported in question 3.6.

Steel producers, if your facility is a GHGRP reporter, do not report fuel use that generated emissions reported under subpart Q.

[Fuel types selected in Q3.5 will be shown as columns in this table]

| | {Fuel type |
|---|------------|------------|------------|------------|------------|
| | selected | selected | selected | selected | selected |
| Process step | in Q3.5} |
| Stationary equipment that shreds or | | | | | |
| sorts scrap. (Do not include use of | | | | | |
| portable equipment such as forklifts or | | | | | |
| trucks.) | | | | | |

| | {Fuel type selected |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|
| Process step | in Q3.5} |
| [If "primary unwrought aluminum | | | | | |
| production" is checked in 1.2.2] Anode | | | | | |
| baking for primary unwrought | | | | | |
| aluminum production | | | | | |
| [If "primary unwrought aluminum | | | | | |
| production" is checked in 1.2.2] | | | | | |
| Smelting of primary unwrought | | | | | |
| <u>aluminum</u> | | | | | |
| [If "primary unwrought aluminum | | | | | |
| production" is checked in 1.2.2] Casting | | | | | |
| of primary unwrought aluminum | | | | | |
| [If "Secondary unwrought aluminum | | | | | |
| production" is checked in 1.2.2] | | | | | |
| Secondary unwrought aluminum | | | | | |
| production | | | | | |
| [If "Wrought aluminum production" is | | | | | |
| checked in 1.2.2] Wrought aluminum | | | | | |
| production (includes production of | | | | | |
| aluminum bars, rods, profiles, wire, | | | | | |
| plates, sheets, strip, foil, tubes, pipes, | | | | | |
| pipe and tube fittings, castings, and | | | | | |
| forgings) | | | | | |
| [If "Metallurgical coke (including coke | | | | | |
| breeze)" production for shipment to | | | | | |
| customers or other facilities or for use | | | | | |
| in the same facility is greater than zero | | | | | |
| in 2.1.1] Metallurgical coke production | | | | | |
| (e.g., in a coke oven or coke battery) | | | | | |
| [If "Calcined lime" or "Calcined dolime" | | | | | |
| production for shipment to customers | | | | | |
| or other facilities or for use in the same | | | | | |
| facility is greater than zero in 2.1.1] | | | | | |
| Lime and dolime production (e.g., in a | | | | | |
| lime kiln) | | | | | |
| [If "Iron sinter" production for | | | | | |
| shipment to customers or other | | | | | |
| facilities or for use in the same facility | | | | | |
| is greater than zero in 2.1.1] Iron sinter | | | | | |
| production | | | | | |
| [If "Oxygen", "Nitrogen", "Argon", or | | | | | |
| "Hydrogen" production for shipment to | | | | | |
| customers or other facilities or for use | | | | | |
| in the same facility is greater than zero | | | | | |

| | {Fuel type |
|--|------------|------------|------------|------------|------------|
| Drocoss stor | selected | selected | selected | selected | selected |
| <i>Process step</i> <i>in 2.1.1</i>] Production of oxygen, | in Q3.5} |
| nitrogen, argon, or hydrogen | | | | | |
| [<i>If "Pig iron, including solid and liquid</i> | | | | | |
| (<i>i.e.</i> , hot metal) pig iron [°] production | | | | | |
| for shipment to customers or other | | | | | |
| facilities or for use in the same facility | | | | | |
| is greater than zero in 2.1.1 and "Steel | | | | | |
| production using a blast furnace (BF) | | | | | |
| and basic oxygen furnace (BOF)" not | | | | | |
| checked in 1.2.2] Liquid pig iron | | | | | |
| production in a <u>rotary hearth furnace</u> | | | | | |
| [If "Steel production using a blast | | | | | |
| furnace (BF) and basic oxygen furnace | | | | | |
| (BOF)" checked in 1.2.2] Blast furnace | | | | | |
| operations, including pig iron casting | | | | | |
| [If "Steel production using an electric | | | | | |
| arc furnace (EAF)" and/or "Steel | | | | | |
| production using a blast furnace (BF) | | | | | |
| and basic oxygen furnace (BOF)" | | | | | |
| checked in 1.2.2] Steelmaking, | | | | | |
| including BOF or EAF operations, | | | | | |
| preheating ferrous scrap, | | | | | |
| refining/ladle station, decarburization, | | | | | |
| and casting | | | | | |
| [If "Stainless semifinished/crude steel" | | | | | |
| and/or "Carbon and other alloy semifinished/crude steel" production | | | | | |
| for shipment to customers or other | | | | | |
| facilities or for use in the same facility | | | | | |
| is greater than zero in 2.1.1] Remelting | | | | | |
| and further working of previously cast | | | | | |
| semifinished/crude steel into different | | | | | |
| forms of semifinished/crude steel | | | | | |
| (e.g., electroslag remelting, vacuum | | | | | |
| arc remelting) | | | | | |
| [If "Stainless hot-rolled flat steel | | | | | |
| products" and/or "Carbon and other | | | | | |
| alloy hot-rolled flat steel products" | | | | | |
| production for shipment to customers | | | | | |
| or other facilities or for use in the same | | | | | |
| facility is greater than zero in 2.1.1] | | | | | |
| Hot rolling flat steel products | | | | | |
| [If "Stainless cold-rolled flat steel | | | | | |
| products and/or "Carbon and other | | | | | |

| Process step | {Fuel type selected in Q3.5} |
|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| alloy cold-rolled flat steel products" | | | | | |
| production for shipment to customers | | | | | |
| or other facilities or for use in the same | | | | | |
| facility is greater than zero in 2.1.1] | | | | | |
| Cold rolling flat steel products | | | | | |
| [If "Carbon and other alloy coated flat | | | | | |
| steel products" production for | | | | | |
| shipment to customers or other | | | | | |
| facilities or for use in the same facility | | | | | |
| is greater than zero in 2.1.1] Coating, | | | | | |
| cladding, or plating flat steel products | | | | | |
| [If "Stainless seamless steel tubular | | | | | |
| products" and/or "Carbon and other | | | | | |
| alloy seamless tubular steel products" | | | | | |
| production for shipment to customers | | | | | |
| or other facilities or for use in the same | | | | | |
| facility is greater than zero in 2.1.1] | | | | | |
| Production of <u>seamless tubular</u> products from a semifinished/crude | | | | | |
| steel substrate and any further | | | | | |
| working of unfinished tubular products | | | | | |
| [If "Stainless non-seamless steel | | | | | |
| tubular products" and/or "Carbon and | | | | | |
| other alloy non-seamless tubular steel | | | | | |
| products" production for shipment to | | | | | |
| customers or other facilities or for use | | | | | |
| in the same facility is greater than zero | | | | | |
| in 2.1.1] Production of non-seamless | | | | | |
| tubular products from a flat steel | | | | | |
| substrate and any further working of | | | | | |
| unfinished tubular products | | | | | |
| [If "Stainless hot-worked long steel | | | | | |
| products" and/or "Carbon and other | | | | | |
| alloy hot-worked long steel products" | | | | | |
| production for shipment to customers | | | | | |
| or other facilities or for use in the same | | | | | |
| facility is greater than zero in 2.1.1] | | | | | |
| Hot working long steel products | | | | | |
| [If "Stainless cold-formed/finished long | | | | | |
| steel products" and/or "Carbon and | | | | | |
| other alloy cold-formed finished long | | | | | |
| steel products" production for | | | | | |
| shipment to customers or other | | | | | |
| facilities or for use in the same facility | | | | | |

| | {Fuel type |
|--|------------|------------|------------|------------|------------|
| Dreases stor | selected | selected | selected | selected | selected |
| Process step | in Q3.5} |
| is greater than zero in 2.1.1] <u>Cold</u> | | | | | |
| forming or cold finishing long steel | | | | | |
| <u>products</u> | | | | | |
| Processes used to make products | | | | | |
| other than covered steel, covered | | | | | |
| aluminum, or their upstream material | | | | | |
| inputs (specify): | | | | | |
| Activities of other producers operating | | | | | |
| on-site (e.g., a producer that leases | | | | | |
| part of your facility whose output is | | | | | |
| not reflected in this questionnaire) | | | | | |
| Ambient heating, cooling, ventilation, | | | | | |
| and lighting supply in facilities where | | | | | |
| production occurs, if measured | | | | | |
| separately from the process-specific | | | | | |
| fuel use reported above | | | | | |
| Ancillary (non-production) activities | | | | | |
| that are not associated with | | | | | |
| production floor operations (e.g., fuel | | | | | |
| used in an adjacent office complex). | | | | | |
| (Do not include quantities that are | | | | | |
| estimated or are attributable to any of | | | | | |
| the processes described above.) | | | | | |
| Total fuel combusted in all processes | Auto | Auto | Auto | Auto | Auto |
| excluding fuel used for on-site power | calculated | calculated | calculated | calculated | calculated |
| generation, on-site cogeneration, and | | | | | |
| in on-site multipurpose boilers) | | | | | |

3.9 Report your facility's **electricity** use associated with each process in 2022. Process-specific quantities should be estimated when granular metered data are not available and should total to the facility's metered data, i.e., both net purchases of electricity and any electricity generated by facility-operated on-site generation units.

| Process step | Quantity of electricity used during process step (megawatt-hours) |
|--|---|
| Stationary equipment that shreds or sorts scrap. (Do not include use | |
| of portable equipment such as forklifts or trucks.) | |
| [If "primary unwrought aluminum production" is checked in 1.2.2] | |
| Anode baking for primary unwrought aluminum production | |
| [If "primary unwrought aluminum production" is checked in 1.2.2] | |
| Smelting of primary unwrought aluminum | |

| [If "primary unwrought aluminum production" is checked in 1.2.2] |
|---|
| Casting of primary unwrought aluminum |
| [If "Secondary unwrought aluminum production" is checked in 1.2.2] |
| Secondary unwrought aluminum production |
| [If "Wrought aluminum production" is checked in 1.2.2] <u>Wrought</u> |
| aluminum production (includes production of aluminum bars, rods, |
| profiles, wire, plates, sheets, strip, foil, tubes, pipes, pipe and tube |
| fittings, castings, and forgings) |
| [If "Metallurgical coke (including coke breeze)" production for |
| shipment to customers or other facilities or for use in the same |
| facility is greater than zero in 2.1.1] Metallurgical coke production |
| (e.g., in a coke oven or coke battery) |
| [If "Calcined lime" or "Calcined dolime" production for shipment to |
| customers or other facilities or for use in the same facility is greater |
| |
| than zero in 2.1.1] Lime and dolime production (e.g., in a lime kiln) |
| [If "Iron sinter" production for shipment to customers or other |
| facilities or for use in the same facility is greater than zero in 2.1.1] |
| Iron sinter production |
| [If "Oxygen", "Nitrogen", "Argon", or "Hydrogen" production for |
| shipment to customers or other facilities or for use in the same |
| facility is greater than zero in 2.1.1] Production of oxygen, nitrogen, |
| argon, or hydrogen |
| [If "Pig iron, including solid and liquid (i.e., hot metal) pig iron" |
| production for shipment to customers or other facilities or for use in |
| the same facility is greater than zero in 2.1.1 and "Steel production |
| using a blast furnace (BF) and basic oxygen furnace (BOF)" not |
| checked in 1.2.2] Liquid pig iron production in a rotary hearth |
| furnace |
| [If "Steel production using a blast furnace (BF) and basic oxygen |
| <i>furnace (BOF)" checked in 1.2.2</i>] <u>Blast furnace</u> operations, including |
| pig iron casting |
| [If "Steel production using an electric arc furnace (EAF)" and/or |
| "Steel production using a blast furnace (BF) and basic oxygen furnace |
| (BOF)" checked in 1.2.2] Steelmaking, including BOF or EAF |
| operations, preheating ferrous scrap, refining/ladle station, |
| decarburization, and casting |
| [If "Stainless semifinished/crude steel" and/or "Carbon and other |
| |
| alloy semifinished/crude steel" production for shipment to customers |
| or other facilities or for use in the same facility is greater than zero in |
| 2.1.1] Remelting and further working of previously cast |
| semifinished/crude steel into different forms of semifinished/crude |
| steel (e.g., electroslag remelting, vacuum arc remelting) |
| [If "Stainless hot-rolled flat steel products" and/or "Carbon and other |
| alloy hot-rolled flat steel products" production for shipment to |
| customers or other facilities or for use in the same facility is greater |
| than zero in 2.1.1] Hot rolling flat steel products |

| [If "Stainless cold-rolled flat steel products and/or "Carbon and other alloy cold-rolled flat steel products" production for shipment to customers or other facilities or for use in the same facility is greater than zero in 2.1.1] <u>Cold rolling flat steel products</u> | |
|--|-----------------|
| [If "Carbon and other alloy coated flat steel products" production for | |
| shipment to customers or other facilities or for use in the same | |
| facility is greater than zero in 2.1.1] Coating, cladding, or plating flat | |
| steel products | |
| [If "Stainless seamless steel tubular products" and/or "Carbon and | |
| other alloy seamless tubular steel products" production for shipment | |
| to customers or other facilities or for use in the same facility is | |
| greater than zero in 2.1.1] Production of seamless tubular products | |
| from a semifinished/crude steel substrate and any further working | |
| of unfinished tubular products | |
| [If "Stainless non-seamless steel tubular products" and/or "Carbon | |
| and other alloy non-seamless tubular steel products" production for | |
| shipment to customers or other facilities or for use in the same | |
| facility is greater than zero in 2.1.1] Production of non-seamless | |
| tubular products from a flat steel substrate and any further working | |
| of unfinished tubular products | |
| [If "Stainless hot-worked long steel products" and/or "Carbon and | |
| other alloy hot-worked long steel products" production for shipment | |
| to customers or other facilities or for use in the same facility is | |
| greater than zero in 2.1.1] Hot working long steel products | |
| [If "Stainless cold-formed/finished long steel products" and/or | |
| "Carbon and other alloy cold-formed finished long steel products" | |
| production for shipment to customers or other facilities or for use in | |
| the same facility is greater than zero in 2.1.1] Cold forming or cold | |
| finishing long steel products | |
| Processes used to make products other than covered steel, covered | |
| aluminum, or their upstream material inputs (specify): | |
| Activities of other producers operating on-site (e.g., a producer that | |
| leases part of your facility whose output is not reflected in this | |
| questionnaire) | |
| Ambient heating, cooling, ventilation, and lighting supply in facilities | |
| where production occurs, if measured separately from the process- | |
| specific electricity use reported above | |
| Ancillary (non-production) activities that are not associated with | |
| production floor operations (e.g., fuel used in an adjacent office | |
| complex). (Do not include quantities that are estimated or are | |
| attributable to any of the processes described above.) | |
| Total | Auto calculated |

3.10 [*If steam selected in 3.2a or 3.2b*] Report the *percentage* of your facility's use of **steam** associated with each process in 2022 in the table below.

- Only report the percentage of steam that was sourced from <u>cogeneration</u> units and multipurpose nonelectric boiler units (exclude steam that is generated and used within the same unit or system, such as steam created by boilers that are solely used to provide ambient heating to the facility).
- If process-specific data are not available, then you should estimate the share of steam used.
- Shares should total to 100 and should represent the share of the facility's total reported steam use (i.e., the sum of reported on-site steam generation and receipts of steam, less any reported sales or transfers of steam to other facilities).

| | Share of steam used during process step (percent of |
|---|--|
| Process step | total) |
| Stationary equipment that shreds or sorts scrap. (Do not include use | |
| of portable equipment such as forklifts or trucks.) | |
| [If "primary unwrought aluminum production" is checked in 1.2.2] | |
| Anode baking for primary unwrought aluminum production | |
| [If "primary unwrought aluminum production" is checked in 1.2.2] | |
| Smelting of primary unwrought aluminum | |
| [If "primary unwrought aluminum production" is checked in 1.2.2] | |
| Casting of primary unwrought aluminum | |
| [If "Secondary unwrought aluminum production" is checked in 1.2.2] | |
| Secondary unwrought aluminum production | |
| [If "Wrought aluminum production" is checked in 1.2.2] Wrought | |
| aluminum production (includes production of aluminum bars, rods, | |
| profiles, wire, plates, sheets, strip, foil, tubes, pipes, pipe and tube | |
| fittings, castings, and forgings) | |
| [If "Metallurgical coke (including coke breeze)" production for | |
| shipment to customers or other facilities or for use in the same facility | |
| is greater than zero in 2.1.1] Metallurgical coke production (e.g., in a | |
| coke oven or coke battery) | |
| [If "Calcined lime or dolime" production for shipment to customers or | |
| other facilities or for use in the same facility is greater than zero in | |
| 2.1.1] Lime and dolime production (e.g., in a lime kiln) | |
| [If "Iron sinter" production for shipment to customers or other | |
| facilities or for use in the same facility is greater than zero in 2.1.1] | |
| Iron sinter production | |
| [If "Oxygen", "Nitrogen", "Argon", or "Hydrogen" production for | |
| shipment to customers or other facilities or for use in the same facility | |
| is greater than zero in 2.1.1] Production of oxygen, nitrogen, argon, or | |
| hydrogen | |
| [If "Pig iron, including solid and liquid (i.e., hot metal) pig iron" | |
| production for shipment to customers or other facilities or for use in | |
| the same facility is greater than zero in 2.1.1 and "Steel production | |
| using a blast furnace (BF) and basic oxygen furnace (BOF)" not | |
| <i>checked in 1.2.2</i>] Liquid <u>pig iron</u> production in a <u>rotary hearth furnace</u> | |

| | Share of steam used during process step (percent of |
|--|---|
| Process step | total) |
| [If "Steel production using a blast furnace (BF) and basic oxygen | |
| <i>furnace (BOF)" checked in 1.2.2</i>] <u>Blast furnace</u> operations, including | |
| pig iron casting [If "Steel production using an electric arc furnace (EAF)" and/or "Steel | |
| production using a blast furnace (BF) and basic oxygen furnace (BOF)" | |
| checked in 1.2.2] Steelmaking, including BOF or EAF operations, | |
| preheating ferrous scrap, refining/ladle station, decarburization, and | |
| casting | |
| [If "Stainless semifinished/crude steel" and/or "Carbon and other | |
| alloy semifinished/crude steel" production for shipment to customers | |
| or other facilities or for use in the same facility is greater than zero in | |
| 2.1.1] Remelting and further working of previously cast | |
| semifinished/crude steel into different forms of semifinished/crude | |
| steel (e.g., electroslag remelting, vacuum arc remelting) | |
| [If "Stainless hot-rolled flat steel products" and/or "Carbon and other | |
| alloy hot-rolled flat steel products" production for shipment to | |
| customers or other facilities or for use in the same facility is greater | |
| than zero in 2.1.1] Hot rolling flat steel products | |
| [If "Stainless cold-rolled flat steel products and/or "Carbon and other | |
| alloy cold-rolled flat steel products" production for shipment to | |
| customers or other facilities or for use in the same facility is greater | |
| than zero in 2.1.1] Cold rolling flat steel products | |
| [If "Carbon and other alloy coated flat steel products" production for | |
| shipment to customers or other facilities or for use in the same facility | |
| is greater than zero in 2.1.1] Coating, cladding, or plating flat steel | |
| products | |
| [If "Stainless seamless steel tubular products" and/or "Carbon and | |
| other alloy seamless tubular steel products" production for shipment | |
| to customers or other facilities or for use in the same facility is greater than zero in 2.1.1] Production of <u>seamless tubular products</u> from a | |
| semifinished/crude steel substrate and any further working of | |
| unfinished tubular products | |
| [If "Stainless non-seamless steel tubular products" and/or "Carbon | |
| and other alloy non-seamless tubular steel products' production for | |
| shipment to customers or other facilities or for use in the same facility | |
| is greater than zero in 2.1.1] Production of non-seamless tubular | |
| products from a flat steel substrate and any further working of | |
| unfinished tubular products | |
| [If "Stainless hot-worked long steel products" and/or "Carbon and | |
| other alloy hot-worked long steel products" production for shipment | |
| to customers or other facilities or for use in the same facility is greater | |
| than zero in 2.1.1] Hot working long steel products | |
| [If "Stainless cold-formed/finished long steel products" and/or | |
| "Carbon and other alloy cold-formed finished long steel products" | |

| | Share of steam used during process step (percent of |
|--|--|
| Process step | total) |
| production for shipment to customers or other facilities or for use in | |
| the same facility is greater than zero in 2.1.1] Cold forming or cold | |
| finishing long steel products | |
| Processes used to make products other than covered steel, covered | |
| aluminum, or their upstream material inputs (specify): | |
| Activities of other producers operating on-site (e.g., a producer that | |
| leases part of your facility whose output is not reflected in this | |
| questionnaire) | |
| Ambient heating, cooling, ventilation, and lighting supply in facilities | |
| where production occurs, if measured separately from the process- | |
| specific steam use reported above | |
| Ancillary (non-production) activities that are not associated with | |
| production floor operations (e.g., fuel used in an adjacent office | |
| complex). (Do not include quantities that are estimated or are | |
| attributable to any of the processes described above.) | |
| Total | Auto calculated |

- 3.11 [*If heat selected for 3.2a or 3.2b*] Report the *percentage* of your facility's use of **heat** associated with each process in 2022 in the table below.
 - Report only the percentage of heat sourced from <u>cogeneration</u> units and multipurpose nonelectric boiler units (exclude heat generated and used within the same unit, such as heat supplied by fuel combustion within a furnace).
 - If process-specific data are not available, then you should estimate the share of heat used.
 - Shares should total to 100 and should represent the share of the facility's total reported heat use (i.e., the sum of reported on-site heat generation and receipts of heat, less any reported sales or transfers of heat to other facilities).

| | Share of heat used during process step |
|--|---|
| Process step | (percent of total) |
| Stationary equipment that shreds or sorts scrap. (Do not include use of | |
| portable equipment such as forklifts or trucks.) | |
| [If "primary unwrought aluminum production" is checked in 1.2.2] <u>Anode</u> | |
| baking for primary unwrought aluminum production | |
| [If "primary unwrought aluminum production" is checked in 1.2.2] <u>Smelting</u> | |
| of primary unwrought aluminum | |
| [If "primary unwrought aluminum production" is checked in 1.2.2] Casting of | |
| primary unwrought aluminum | |
| [If "Secondary unwrought aluminum production" is checked in 1.2.2] | |
| Secondary unwrought aluminum production | |
| [If "Wrought aluminum production" is checked in 1.2.2] Wrought aluminum | |
| production (includes production of aluminum bars, rods, profiles, wire, | |
| plates, sheets, strip, foil, tubes, pipes, pipe and tube fittings, castings, and | |
| forgings) | |

| Process step | Share of heat used during process step (percent of total) |
|--|---|
| [If "Metallurgical coke (including coke breeze)" production for shipment to | (percent of total) |
| customers or other facilities or for use in the same facility is greater than | |
| zero in 2.1.1] Metallurgical coke production (e.g., in a coke oven or coke | |
| battery) | |
| [If "Calcined lime or dolime" production for shipment to customers or other | |
| facilities or for use in the same facility is greater than zero in 2.1.1] Lime and | |
| dolime production (e.g., in a lime kiln) | |
| [If "Iron sinter" production for shipment to customers or other facilities or | |
| for use in the same facility is greater than zero in 2.1.1] <u>Iron sinter</u> | |
| production | |
| [If "Oxygen", "Nitrogen", "Argon", or "Hydrogen" production for shipment | |
| to customers or other facilities or for use in the same facility is greater than | |
| zero in 2.1.1] Production of oxygen, nitrogen, argon, or hydrogen | |
| [If "Pig iron, including solid and liquid (i.e., hot metal) pig iron" production | |
| for shipment to customers or other facilities or for use in the same facility is | |
| greater than zero in 2.1.1 and "Steel production using a blast furnace (BF) | |
| and basic oxygen furnace (BOF)" not checked in 1.2.2] Liquid <u>pig iron</u> | |
| production in a <u>rotary hearth furnace</u> | |
| [<i>If "Steel production using a blast furnace (BF) and basic oxygen furnace (BOF)" checked in 1.2.2</i>] <u>Blast furnace</u> operations, including <u>pig iron</u> casting | |
| [If "Steel production using an electric arc furnace (EAF)" and/or "Steel | |
| production using a blast furnace (BF) and basic oxygen furnace (BOF)" | |
| <i>checked in 1.2.2</i>] <u>Steelmaking</u> , including BOF or EAF operations, preheating | |
| ferrous scrap, refining/ladle station, decarburization, and casting | |
| [If "Stainless semifinished/crude steel" and/or "Carbon and other alloy | |
| semifinished/crude steel" production for shipment to customers or other | |
| facilities or for use in the same facility is greater than zero in 2.1.1] | |
| Remelting and further working of previously cast semifinished/crude steel | |
| into different forms of semifinished/crude steel (e.g., electroslag remelting, | |
| vacuum arc remelting) | |
| [If "Stainless hot-rolled flat steel products" and/or "Carbon and other alloy | |
| hot-rolled flat steel products" production for shipment to customers or other | |
| facilities or for use in the same facility is greater than zero in 2.1.1] <u>Hot</u> | |
| rolling flat steel products | |
| [If "Stainless cold-rolled flat steel products and/or "Carbon and other alloy | |
| cold-rolled flat steel products" production for shipment to customers or | |
| other facilities or for use in the same facility is greater than zero in 2.1.1] | |
| Cold rolling flat steel products | |
| [If "Carbon and other alloy coated flat steel products" production for | |
| shipment to customers or other facilities or for use in the same facility is | |
| greater than zero in 2.1.1] Coating, cladding, or plating flat steel products | |
| [If "Stainless seamless steel tubular products" and/or "Carbon and other | |
| alloy seamless tubular steel products" production for shipment to customers | |
| or other facilities or for use in the same facility is greater than zero in 2.1.1] | |

| Process step | Share of heat used during process step (percent of total) |
|--|---|
| Production of seamless tubular products from a semifinished/crude steel | |
| substrate and any further working of unfinished tubular products | |
| [If "Stainless non-seamless steel tubular products" and/or "Carbon and | |
| other alloy non-seamless tubular steel products" production for shipment to | |
| customers or other facilities or for use in the same facility is greater than | |
| <i>zero in 2.1.1</i>] Production of non-seamless tubular products from a flat steel | |
| substrate and any further working of unfinished tubular products | |
| [If "Stainless hot-worked long steel products" and/or "Carbon and other | |
| alloy hot-worked long steel products" production for shipment to customers | |
| or other facilities or for use in the same facility is greater than zero in 2.1.1] | |
| Hot working long steel products | |
| [If "Stainless cold-formed/finished long steel products" and/or "Carbon and | |
| other alloy cold-formed finished long steel products" production for | |
| shipment to customers or other facilities or for use in the same facility is | |
| greater than zero in 2.1.1] Cold forming or cold finishing long steel products | |
| Processes used to make products other than covered steel, covered | |
| aluminum, or their upstream material inputs (specify): | |
| Activities of other producers operating on-site (e.g., a producer that leases | |
| part of your facility whose output is not reflected in this questionnaire) | |
| Ambient heating, cooling, ventilation, and lighting supply in facilities where | |
| production occurs, if measured separately from the process-specific heat | |
| use reported above | |
| Ancillary (non-production) activities that are not associated with production | |
| floor operations (e.g., fuel used in an adjacent office complex). (Do not | |
| include quantities that are estimated or are attributable to any of the | |
| processes described above.) | |
| Total | Auto calculated |

3.12 [*If hot water selected for 3.2a or 3.2b*] Report your facility's use of **hot water** associated with each process in 2022 in the table below, *as a percent* to total hot water use.

- Report only the percentage of hot water sourced from <u>cogeneration</u> units and multipurpose nonelectric boilers (exclude hot water generated and used exclusively within the same unit).
- If process-specific data are not available, then you should estimate the share of hot water used.
- Shares should total to 100 and should represent the share of facility's total reported hot water use (i.e., the sum of reported on-site hot water generation and receipts of hot water, less any reported sales or transfers of hot water to other facilities).

| | Share of hot water |
|---|-------------------------|
| | used during process |
| Process step | step (percent of total) |
| Stationary equipment that shreds or sorts scrap. (Do not include use of | |
| portable equipment such as forklifts or trucks.) | |

| [If "primary unwrought aluminum production" is checked in 1.2.2] Anode | |
|--|--|
| baking for primary unwrought aluminum production | |
| [<i>If "primary unwrought aluminum production" is checked in 1.2.2</i>] Smelting | |
| of primary unwrought aluminum | |
| [<i>If "primary unwrought aluminum production" is checked in 1.2.2</i>] Casting of | |
| primary unwrought aluminum | |
| [If "Secondary unwrought aluminum production" is checked in 1.2.2] | |
| Secondary unwrought aluminum production | |
| [If "Wrought aluminum production" is checked in 1.2.2] Wrought aluminum | |
| production (includes production of aluminum bars, rods, profiles, wire, | |
| plates, sheets, strip, foil, tubes, pipes, pipe and tube fittings, castings, and | |
| forgings) | |
| [If "Metallurgical coke (including coke breeze)" production for shipment to | |
| customers or other facilities or for use in the same facility is greater than | |
| zero in 2.1.1] Metallurgical coke production (e.g., in a coke oven or coke | |
| battery) | |
| [If "Calcined lime or dolime" production for shipment to customers or other | |
| facilities or for use in the same facility is greater than zero in 2.1.1] Lime and | |
| dolime production (e.g., in a lime kiln) | |
| [If "Iron sinter" production for shipment to customers or other facilities or | |
| for use in the same facility is greater than zero in 2.1.1] Iron sinter | |
| production | |
| [If "Oxygen", "Nitrogen", "Argon", or "Hydrogen" production for shipment | |
| to customers or other facilities or for use in the same facility is greater than | |
| zero in 2.1.1] Production of oxygen, nitrogen, argon, or hydrogen | |
| [If "Pig iron, including solid and liquid (i.e., hot metal) pig iron" production | |
| for shipment to customers or other facilities or for use in the same facility is | |
| greater than zero in 2.1.1 and "Steel production using a blast furnace (BF) | |
| and basic oxygen furnace (BOF)" not checked in 1.2.2] Liquid <u>pig iron</u> | |
| production in a <u>rotary hearth furnace</u> | |
| [If "Steel production using a blast furnace (BF) and basic oxygen furnace | |
| (BOF)" checked in 1.2.2] Blast furnace operations, including pig iron casting | |
| [If "Steel production using an electric arc furnace (EAF)" and/or "Steel | |
| production using a blast furnace (BF) and basic oxygen furnace (BOF)" | |
| <i>checked in 1.2.2</i>] <u>Steelmaking</u> , including BOF or EAF operations, preheating | |
| ferrous scrap, refining/ladle station, decarburization, and casting | |
| [If "Stainless semifinished/crude steel" and/or "Carbon and other alloy | |
| semifinished/crude steel" production for shipment to customers or other | |
| facilities or for use in the same facility is greater than zero in 2.1.1] | |
| Remelting and further working of previously cast semifinished/crude steel | |
| into different forms of semifinished/crude steel (e.g., electroslag remelting, | |
| vacuum arc remelting) | |
| [If "Stainless hot-rolled flat steel products" and/or "Carbon and other alloy | |
| hot-rolled flat steel products" production for shipment to customers or other | |
| facilities or for use in the same facility is greater than zero in 2.1.1] <u>Hot</u> | |
| rolling flat steel products | |

| [If "Stainless cold-rolled flat steel products and/or "Carbon and other alloy | |
|---|-----------------|
| cold-rolled flat steel products" production for shipment to customers or | |
| other facilities or for use in the same facility is greater than zero in 2.1.1] | |
| Cold rolling flat steel products | |
| [If "Carbon and other alloy coated flat steel products" production for | |
| | |
| shipment to customers or other facilities or for use in the same facility is | |
| greater than zero in 2.1.1] Coating, cladding, or plating flat steel products | |
| [If "Stainless seamless steel tubular products" and/or "Carbon and other | |
| alloy seamless tubular steel products" production for shipment to customers | |
| or other facilities or for use in the same facility is greater than zero in 2.1.1] | |
| Production of <u>seamless tubular products</u> from a semifinished/crude steel | |
| substrate and any further working of unfinished tubular products | |
| [If "Stainless non-seamless steel tubular products" and/or "Carbon and | |
| other alloy non-seamless tubular steel products" production for shipment to | |
| customers or other facilities or for use in the same facility is greater than | |
| <i>zero in 2.1.1</i>] Production of <u>non-seamless tubular products</u> from a flat steel | |
| substrate and any further working of unfinished tubular products | |
| [If "Stainless hot-worked long steel products" and/or "Carbon and other | |
| alloy hot-worked long steel products" production for shipment to customers | |
| or other facilities or for use in the same facility is greater than zero in 2.1.1] | |
| Hot working long steel products | |
| [If "Stainless cold-formed/finished long steel products" and/or "Carbon and | |
| other alloy cold-formed finished long steel products" production for | |
| shipment to customers or other facilities or for use in the same facility is | |
| greater than zero in 2.1.1] Cold forming or cold finishing long steel products | |
| Processes used to make products other than covered steel, covered | |
| aluminum, or their upstream material inputs (specify): | |
| Activities of other producers operating on-site (e.g., a producer that leases | |
| part of your facility whose output is not reflected in this questionnaire) | |
| Ambient heating, cooling, ventilation, and lighting supply in facilities where | |
| production occurs, if measured separately from the process-specific heat | |
| use reported above | |
| Ancillary (non-production) activities that are not associated with production | |
| floor operations (e.g., fuel used in an adjacent office complex). (Do not | |
| include quantities that are estimated or are attributable to any of the | |
| processes described above.) | |
| Total | Auto calculated |
| 1000 | |

3.13 If you would like to provide any additional context on your facility's fuel combustion and energy allocation to specific processes, do so here._____

SECTION 4. Purchased Energy

If your company operates multiple facilities and purchases U.S. <u>energy attribute certificates</u> (EACs) such as <u>renewable energy certificates</u> (RECs), coordination with a centralized company contact may be needed to complete this section to ensure each certificate is allocated to one and only one facility. This section asks about some situations that are **uncommon**, such as whether any electricity is purchased through plant-specific contractual arrangements and whether electricity is supplied via <u>direct line</u> <u>connections</u>. If internal contacts familiar with your facility's operations and energy procurement are not aware of these occurring, they probably do not apply to your facility. Similarly, if relevant internal contacts are not aware of any purchases of energy attribute certificates, they probably do not apply to your company. You may note any uncertainties about this information in question 4.6.

As with the entirety of your response, answers to the questions in this section will be treated as confidential business information. To download a copy of our confidentiality statement, click <u>here</u>.

4.1 Report the quantity of **electricity** in megawatt-hours that your facility purchased in 2022. (Include electricity purchased from <u>cogeneration</u> units and electricity received from generators that are located on-site but <u>operated</u> by a third-party. If your facility also sold some electricity, report net purchases and report a negative value if your facility sold more electricity than it purchased.)

[If 4.1 less than or equal to zero, skip to 4.7]

4.2

- a. Select your facility's eGRID subregion. If you do not know the eGRID subregion, look it up by entering your facility's zip code into EPA's Power Profiler (<u>https://www.epa.gov/egrid/power-profiler#/</u>, under "How clean is the electricity you use?"), and if prompted, selecting your <u>utility</u> provider. {dropdown of all eGRID subregions}
- b. If your facility's utility provider changed during 2022, list each of your <u>utility</u> **providers** in 2022 along with the amount of electricity (in megawatt-hours) they delivered to your facility in 2022.

- a. Does your facility use an emissions factor provided from a <u>utility</u> or from a <u>retail energy</u> <u>supplier</u> for the electricity it purchased from that supplier in 2022?
 - o Yes
 - **No**
- b. [*If "yes" to Q4.3a*] Can you confirm that the supplier's **emissions factor** includes all electricity delivered by the supplier (not just electricity generated by the supplier) and does not double

^{4.3}

count <u>renewable energy certificates</u> (RECs) or other <u>energy attribute certificates</u> (EACs) that were sold to third parties or retired on behalf of customers?

- o Yes
- o **No**
- c. [*If "yes" to Q4.3b*] What is the supplier's **emissions factor** for delivered electricity (in metric tons of CO₂-equivalent emissions per megawatt-hour)? _____
- d. [If "yes" to Q4.3b] How much electricity in megawatt-hours did you purchase from this supplier in 2022? (Exclude any purchases of electricity from this supplier that were bundled with <u>energy</u> <u>attribute certificates</u> that your facility retired or that were purchased separately in plant-specific contracts. (Those purchases will be reported in Q4.4 and 4.5.)) ______

4.4

- a. Did your company purchase U.S. <u>energy attribute certificates</u> (EACs) for renewable or zeroemission energy such as renewable energy certificates (RECs) that were retired for the year 2022 and may be associated with this facility's operations?
 - o Yes
 - o **No**
- b. [If "yes" to Q4.4a] List your facility's purchases of U.S. energy attribute certificates (EACs) for renewable or zero-emission energy such as renewable energy certificates (RECs) in the table below, in groups by the tracking system that issued them (e.g., PJM's Generation Attribute Tracking System, Midwest Renewable Energy Tracking System), whether they were bundled with electricity supplied via a direct line connection, and whether they were independently certified. You may be able to report all of your facility's certificates as a single group. Only group and report certificates that your company retired or that were retired specifically on your company's behalf (e.g., through a utility program) for 2022. Do not include RECs from your facility's on-site generation reported in section 3.

| Certificate group (Combine EACs with the same responses to the second through fourth columns into a single certificate group) | Which tracking system issued the certificates? {dropdown of options} | Are the certificates bundled with electricity supplied via a direct line connection? (yes/no) | Were the certificates independently certified? (yes/no) | How many EACs in this group were retired for 2022? (megawatt- hours) |
|---|--|--|---|---|
| Certificate group 1 | | | | |
| Certificate group 2 | | | | |
| Certificate group 3 | | | | |
| Certificate group 4 | | | | |
| Certificate group 5 | | | | |

- c. [*If "yes" to Q4.4a*] If your facility retired more than five groups of **U.S.** <u>energy attribute</u> <u>certificates</u> (EACs) for 2022, provide information on your other certificates here.
- d. [*If "yes" to Q4.4a*] If your company has multiple facilities, check to confirm that **none of the U.S.** <u>energy attribute certificates</u> (EACs) reported above were covered in a different facility's questionnaire or in other emissions reporting for your company's other facilities such as environmental product declarations.
- e. [*If "yes" to Q4.4a*] If your company has multiple facilities, describe how the **U.S.** <u>energy</u> <u>attribute certificate</u> (EAC) amounts listed above were allocated to this facility.
- f. [*If "yes" to Q4.4a*] (**Uncommon**) If you purchased electricity supplied via a <u>direct line connection</u> from a plant that issued EACs between July 2022 and March 2023 and the quantity of electricity supplied in 2022 exceeded the bundled certificates reported in part b, report the additional electricity supplied here in megawatt-hours.

4.5

a. (Uncommon) If your facility has any contractual arrangements for individual power plants or cogeneration plants to supply electricity in 2022, such as with on-site third-party-operated plants, report them in the table below. Only do this for plants that *did not* issue any U.S. <u>energy</u> attribute certificates (EACs) for renewable or zero-emission energy between July 2022 and March 2023.

If your facility does not have any of these contractual arrangements, leave the table blank.

| Power plant or cogeneration plant | Plant name | EIA/ORIS plant code (scroll below map and use the filter/order button above the table to search or filter by sector, state, and fuel type) | Was the electricity supplied via a direct line connection? (yes/no) | How much electricity was supplied in this way? (megawatt- hours) |
|--------------------------------------|------------|--|---|--|
| Power plant or cogeneration plant 1 | | | | |

| Power plant or cogeneration plant | Plant name | EIA/ORIS plant code (scroll below map and use the filter/order button above the table to search or filter by sector, state, and fuel type) | Was the electricity supplied via a direct line connection? (yes/no) | How much electricity was supplied in this way? (megawatt- hours) |
|--------------------------------------|------------|--|---|--|
| Power plant or | | | | |
| cogeneration plant 2 | | | | |
| Power plant or | | | | |
| cogeneration plant 3 | | | | |
| Power plant or | | | | |
| cogeneration plant 4 | | | | |
| Power plant or | | | | |
| cogeneration plant 5 | | | | |

- b. If you have more than five contractual arrangements with individual plants that did not issue
 U.S. energy attribute certificates (EACs) in 2022, provide information on those other arrangements here.
- 4.6 If you would like to provide any additional context on your facility's **sourcing of electricity**, do so here. _____
- 4.7 [If "steam", "heat", and/or "hot water" selected in Q3.2a] Report the net quantities of all steam, heat, and hot water received in 2022 from third-party-operated cogeneration units and third-party-operated boiler units, including from off-site units, by supplying plant information in the table below. Exclude quantities sold back to the supplier. If you received steam, heat, or hot water from fewer than three third-party-operated sources, leave the remaining rows blank.

| Type of energy supplied | Plant name | EIA/ORIS plant code (scroll below map and use the filter/order button above the table to search or filter by sector, state, and fuel type) | How much energy was supplied from this plant? |
|-------------------------|------------|---|--|
| Steam (units piped from | | | |
| 3.2c) | | | |

| Steam (units piped from | | |
|-------------------------|--|--|
| 3.2c) | | |
| Steam (units piped from | | |
| 3.2c) | | |
| Heat (units piped from | | |
| 3.2d) | | |
| Heat (units piped from | | |
| 3.2d) | | |
| Heat (units piped from | | |
| 3.2d) | | |
| Hot water (units piped | | |
| from 3.2e) | | |
| Hot water (units piped | | |
| from 3.2e) | | |
| Hot water (units piped | | |
| from 3.2e) | | |

SECTION 5. Uses and Sources of Production Inputs

The following questions ask you to quantify your facility's uses and sources of various covered products and materials used as production inputs in 2022. In response to these questions, only provide quantities of inputs that were intended for use in <u>production</u>. To the extent that you can exclude from your reported data any purchases intended for redistribution or for on-site construction, please do so.

As with the entirety of your response, answers to the questions in this section will be treated as confidential business information. To download a copy of our confidentiality statement, click <u>here</u>.

[If "Steel" selected in question 1.2.1, respondent will see and answer questions in Section 5.1. If "Aluminum" selected in question 1.2.1, respondent will see and answer questions in Section 5.2]

Section 5.1 Uses and Sources of Production Inputs for Steel

| Material | Did your facility use this material as a production input? (<i>check if yes</i>) |
|--|--|
| Iron pellets (including fines from pellet plants) | |
| Ferroalloys and other alloying metals | |
| Carbon electrodes | |
| Ferrous scrap | |
| Direct reduced iron (DRI) or hot briquetted iron (HBI) | |
| Coating, cladding, and plating metals | |
| None of the above | |

5.1.1 Did your facility use any of the following materials as production inputs in 2022?

5.1.2 Did your facility use any of the following materials as production inputs in 2022? For any material that you used: was all that material sourced from your facility's on-site production (i.e., by processes under your facility's <u>operational control</u>)? (Note: if you received material from another facility (regardless of common ownership) do not check "yes" in response to this second question).

| Material | Did your facility use this material as a production input? (<i>check if yes</i>) | Was all of this material sourced from facility's on-site production? (<i>check if yes</i>) |
|--|--|---|
| Metallurgical coke (including coke breeze) | | |
| Flux materials (calcined lime, dolime, non- calcined limestone or dolomite, or other flux materials) | | |
| Iron sinter (including fines from sinter plants) | | |
| Oxygen | | |
| Argon | | |
| Nitrogen | | |
| Hydrogen | | |

| Pig iron, including solid and liquid (i.e., hot metal) pig iron | |
|---|--|
| None of the above | |

5.1.3 Did your facility use any of the following steel products (either stainless or carbon and other alloy) as production inputs in 2022? For any steel category that you used: was all that steel sourced from your facility's on-site production (i.e., by processes under your facility's <u>operational control</u>)? (Note: if you received material from another facility (regardless of common ownership) do not check "yes" in response to this second question).

| Steel product category | Did your facility use this material as a production input? (<i>check if yes</i>) | Was all of this material sourced from facility's on- site production? (<i>check if</i> <i>yes</i>) | |
|---|--|---|--|
| Semifinished/crude steel (ingots, billets, | | | |
| blooms, slabs, and beams as well as continuously cast and liquid steel) | | | |
| Hot-rolled flat steel products | | | |
| Cold-rolled flat steel products | | | |
| Coated flat steel products (carbon and other alloy steel only) | | | |
| Seamless steel tubular products | | | |
| Non-seamless tubular products | | | |
| Hot-worked long steel products | | | |
| Cold-formed/finished long steel products | | | |
| None of the above | | | |

Materials as production inputs

Natural gas

5.1.4

- a. Did your facility use **natural gas** as feedstock (e.g., as a <u>reductant</u>, foaming agent, or <u>cooling agent</u>) in 2022? For <u>GHGRP</u> reporters, answer "yes" if your facility used any natural gas that generated emissions reported under <u>subpart Q</u>, even if such emissions were due to fuel combustion.
 - o Yes
 - o No

[If 5.1.4a is yes] In what unit is your natural gas used as feedstock measured?

- $\circ \quad \text{standard cubic feet} \quad$
- \circ therms
- million British thermal units

b. [If 5.1.4a is yes] Report the quantity of natural gas that your facility used as feedstock (e.g., as a reductant, foaming agent, or cooling agent) in different processes in 2022. For GHGRP reporters, include the quantity of natural gas that generated emissions reported under subpart Q, even if such emissions were due to fuel combustion. Do not report any quantity of natural gas that generated emissions reported in responses to questions in section 3 of this questionnaire.

| Dreases that used natural sec | Quantity of <i>natural gas</i> used as feedstock AND/OR that generated emissions reported under subpart Q of GHGRP ({UNIT BASED ON RESPONSE TO 5.1.4a}) |
|---|--|
| Process that used natural gas | ({UNIT DASED ON RESPONSE TO 5.1.4a}) |
| Iron sinter production | |
| Liquid <u>pig iron</u> production in a <u>rotary hearth furnace</u> | |
| Blast furnace operations, including pig iron casting | |
| Steelmaking, including BOF or EAF operations, | |
| preheating ferrous scrap, refining/ladle station, | |
| decarburization, and casting | |
| Other processes used to make covered steel products or | |
| their upstream material inputs (specify): | |
| Processes used to make products other than covered | |
| steel products or their upstream material inputs | |
| (specify): | |
| Total | auto calculated |

Coal and coal-based carbon additives

5.1.5

- a. Did your facility use <u>coal or other coal-based carbon additives</u> (excluding metallurgical coke and coke breeze) as feedstock in 2022? For <u>GHGRP</u> reporters, answer "yes" if your facility used any coal or other carbon additives that generated emissions reported under <u>subpart Q</u>, even if such emissions were due to fuel combustion.
 - o Yes
 - **No**
- b. [*If 5.1.5a is yes*] Report the quantity of <u>coal and coal-based carbon additives</u> (excluding metallurgical coke or coke breeze) that your facility used as feedstock in different processes in 2022. For <u>GHGRP</u> reporters, include the quantity of coal and coal-based carbon additives that generated emissions reported under <u>subpart Q</u>, even if such emissions were due to fuel combustion. Do not report any quantity of coal that generated emissions reported under <u>subpart C</u> or that you reported in responses to questions in section 3 of this questionnaire.

| | Quantity of coal and coal- |
|--|------------------------------|
| | based carbon additives used |
| | as feedstock AND/OR that |
| Process that used coal and coal-based carbon additives | generated emissions reported |

| | under subpart Q of GHGRP ({metric tons/short tons}) |
|--|--|
| Metallurgical coke production (e.g., in a coke oven or coke battery) | |
| Iron sinter production | |
| Liquid pig iron production in a rotary hearth furnace | |
| Blast furnace operations, including pig iron casting | |
| Steelmaking, including BOF or EAF operations, preheating ferrous | |
| scrap, refining/ladle station, decarburization, and casting. (Includes | |
| use of injection or charge carbon in steelmaking furnaces). | |
| Other processes used to make covered steel products or their | |
| upstream material inputs (specify): | |
| Processes used to make products other than covered steel products | |
| or their upstream material inputs (specify): | |
| Total | auto calculated |

- c. [If a non-zero value is reported in question 5.1.5b for "Steelmaking" AND the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)] Do you know or have the ability to estimate the carbon content of the coal and coal-based carbon additives (excluding metallurgical coke and coke breeze) that your facility used as feedstock in electric arc furnaces in 2022?
 - o Yes
 - 0 **No**
- d. [If yes to 5.1.5c] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>coal and coal-based carbon additives</u> (excluding metallurgical coke and coke breeze) that your facility used as feedstock in electric arc furnaces in 2022. _____

Metallurgical coke

5.1.6

a. [*If 5.1.2 is yes for metallurgical coke in first column*] Report the quantity of <u>metallurgical coke</u> (including <u>coke breeze</u>) that your facility used in different processes in 2022. Include metallurgical coke **from all sources**, including your facility's own <u>production</u>.

| | Quantity of <i>metallurgical coke</i> used by facility ({metric |
|---|--|
| Process that used metallurgical coke | tons/short tons}) |
| Iron sinter production | |
| Blast furnace operations, including pig iron casting | |
| Steelmaking, including BOF or EAF operations, preheating | |
| ferrous scrap, refining/ladle station, decarburization, and casting | |
| Other processes used to make covered steel products or their | |
| upstream material inputs (specify): | |
| Processes used to make products other than covered steel | |
| products or their upstream material inputs (specify): | |

- b. [If a non-zero value is reported in question 5.1.6a for "Steelmaking" AND the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)] Do you know or have the ability to estimate the <u>carbon content</u> of the <u>metallurgical coke</u> that your facility used in electric arc furnaces in 2022?
 - o Yes
 - **No**
- c. [*If yes to 5.1.6b*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>metallurgical coke</u> that your facility used in electric arc furnaces in 2022.
- d. [If 5.1.2 is yes for the first column and no selection for the second column (metallurgical coke)] Report the quantity (in {metric tons/short tons}) of metallurgical coke that your facility received from external sources, regardless of common ownership, in 2022. _____

Other carbonaceous materials

5.1.7

- a. [*If the facility is an EAF reporter (based on response to question 1.2.2)*] Did your facility use carbonaceous materials other than those derived from coal (e.g., charcoal, petroleum coke, used tires, biomass) in electric arc furnaces in 2022?
 - o Yes
 - 0 **No**
- b. [If yes to 5.1.7a] Report the quantities of the following types of <u>carbonaceous materials other</u> <u>than those derived from coal</u> used in your facility's electric arc furnaces in 2022.

| Carbonaceous material | Quantity of <i>carbonaceous materials other than those</i> <i>derived from coal</i> used in EAFs ({metric tons/short tons}) |
|---|--|
| Charcoal | |
| Petroleum coke | |
| Used tires | |
| Biomass | |
| Other carbonaceous materials not derived from coal (specify): | |
| Total | auto calculated |

c. [If yes to 5.1.7a and the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)] Do you know or have the ability to estimate the <u>carbon content</u> of the <u>carbonaceous</u>

<u>materials other than those derived from coal</u> that your facility used in electric arc furnaces in 2022 (quantified in question 5.1.7b above)?

- o Yes
- 0 **No**
- d. [*If yes to 5.1.7c*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>carbonaceous materials other than those derived from coal</u> that your facility used in electric arc furnaces in 2022. _____

Flux materials

5.1.8

a. [*If 5.1.2 is yes for flux materials in the first column*] Report the quantity of <u>flux materials</u> that your facility used in different processes in 2022. Include flux materials **from all sources**, including your facility's own production.

| Process that used flux materials | Quantity of non-calcined limestone and dolomite used by facility ({metric tons/short tons}) | Quantity of calcined lime used by facility ({metric tons/short tons}) | Quantity of <i>calcined</i> <i>dolime</i> used by facility ({metric tons/short tons}) | Quantity of other flux materials (e.g., alumina, silica) including mixtures used by facility ({metric tons/short tons}) |
|--|--|---|---|---|
| Lime and dolime production (e.g., in a lime kiln) | | | | |
| Iron sinter production | | | | |
| Blast furnace operations, | | | | |
| including pig iron casting | | | | |
| Steelmaking, including BOF | | | | |
| or EAF operations, | | | | |
| preheating ferrous scrap, | | | | |
| refining/ladle station, | | | | |
| decarburization, and casting | | | | |
| Remelting and further | | | | |
| working of previously cast | | | | |
| semifinished/crude steel into | | | | |
| different forms of | | | | |
| semifinished/crude steel | | | | |
| (e.g., electroslag remelting, | | | | |
| vacuum arc remelting) | | | | |
| Other processes used to | | | | |
| make covered steel products | | | | |
| or their upstream material inputs (specify): | | | | |

| Processes used to make products other than covered steel products or their upstream material inputs (specify): | | | | |
|--|-----------------|--------------------|--------------------|-----------------|
| Total | auto calculated | auto calculated | auto calculated | auto calculated |

- b. [If any non-zero value is reported under quantity of other flux materials in the fourth column of Q5.1.8a] Identify the other <u>flux materials</u> (those other than non-calcined limestone, calcined lime, or calcined dolime) that your facility used and reported in response to question 5.1.8a.
- c. [If any non-zero value is reported in question 5.1.8a for "Steelmaking" AND the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)] Do you know or have the ability to estimate the <u>carbon content</u> of the <u>flux materials</u> (including lime, dolime, or any other flux materials) that your facility used in electric arc furnaces in 2022?
 - o Yes
 - 0 **No**
- d. [*If yes to 5.1.8c*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>flux materials</u> that your facility used in electric arc furnaces in 2022.
- e. [If 5.1.2 is yes for the first column and no selection for the second column (flux materials)] Report the quantity of <u>calcined lime</u> and <u>calcined dolime</u> that your facility received from <u>external</u> <u>sources</u>, regardless of common ownership, in 2022.

| | Quantity received from external sources ({metric |
|-----------------|--|
| Flux material | tons/short tons}) |
| Calcined lime | |
| Calcined dolime | |

Iron pellets and iron sinter

5.1.9

a. [*If 5.1.1 is yes (iron pellets) or if 5.1.2 is yes for the first column (iron sinter)*] Report the quantity of <u>iron pellets</u> and <u>iron sinter</u> (including fines from pellet and sinter plants, respectively) that your facility used in different processes in 2022. Include iron pellets and sinter **from all sources**, including your facility's own production.

| Process that used iron pellets and/or iron sinter | Quantity of <i>iron</i> <i>pellets</i> (including fines from pellet plants) used by facility ({metric tons/short tons}) | Quantity of <i>iron</i> <i>sinter</i> (including fines from sinter plants) used by facility ({metric tons/short tons}) |
|--|--|---|
| Iron sinter production | | |
| Liquid <u>pig iron</u> production in a <u>rotary hearth furnace</u> | | |
| Blast furnace operations, including pig iron casting | | |
| Other processes used to make covered steel products or their upstream material inputs (specify): | | |
| Processes used to make products other than covered steel products or their upstream material inputs (specify): | | |
| Total | auto calculated | auto calculated |

b. [*If 5.1.1 is yes (iron pellets)*] Report the quantity of <u>iron pellets</u> (including fines from pellet plants) that your facility received from <u>external sources</u> (regardless of common ownership) in 2022, by source type. The source of iron pellets is the facility that pelletized iron (e.g., through a taconite indurating furnace or similar process).

| | Quantity of <i>iron pellets</i> received by your facility from | |
|----------------------|--|--|
| External source type | source ({metric tons/short tons}) | |
| U.S. sources | | |
| Import sources | | |
| Unknown sources | | |
| Total | auto calculated | |

c. [*If a non-zero value is reported in question 5.1.9b under "import sources"*] Report the quantity of iron pellets (including fines from pellet plants) that your facility received in 2022 from individual source countries.

| Import source country | Quantity of imported <i>iron pellets</i> received by your facility from source country ({metric tons/short tons}) |
|-----------------------|--|
| Bahrain | |
| Brazil | |
| Canada | |
| Sweden | |
| Ukraine | |
| All other or unknown | |
| Total | auto calculated |

d. [*If 5.1.2 is yes for first column and no selection for second column (iron sinter)*] Report the quantity (in {metric tons/short tons}) of <u>iron sinter</u> (including fines from sinter plants) that your facility received **from <u>external sources</u>**, regardless of common ownership, in 2022. _____

Oxygen, argon, nitrogen, and hydrogen

5.1.10

a. [*If 5.1.2 is yes for first column (oxygen or nitrogen)*] Report the quantity of **oxygen** and **nitrogen** that your facility used in different processes in 2022. Include gas **from all sources**, including your facility's own production.

| | Quantity of <i>oxygen</i> used by facility | Quantity of <i>nitrogen</i> used by facility |
|---|---|---|
| Process that used oxygen and/or nitrogen | (standard cubic feet) | (standard cubic feet) |
| Metallurgical coke production (e.g., in a coke oven or | | |
| coke battery) | | |
| Lime and dolime production (e.g., in a lime kiln) | | |
| Iron sinter production | | |
| Liquid <u>pig iron</u> production in a <u>rotary hearth furnace</u> | | |
| Blast furnace operations, including pig iron casting | | |
| Steelmaking, including BOF or EAF operations, | | |
| preheating ferrous scrap, refining/ladle station, | | |
| decarburization, and casting | | |
| Remelting and further working of previously cast | | |
| semifinished/crude steel into different forms of | | |
| semifinished/crude steel (e.g., electroslag remelting, | | |
| vacuum arc remelting) | | |
| Hot rolling flat steel products | | |
| Cold rolling flat steel products | | |
| Coating, cladding, or plating flat steel products | | |
| Hot working long steel products | | |
| Cold forming or cold finishing long steel products | | |
| Production of seamless tubular products from a | | |
| semifinished/crude steel substrate and any further | | |
| working of unfinished tubular products | | |
| Production of non-seamless tubular products from a | | |
| flat steel substrate and any further working of | | |
| unfinished tubular products | | |
| Other processes used to make covered steel products | | |
| or their upstream material inputs (specify): | | |
| Processes used to make products other than covered | | |
| steel products or their upstream material inputs | | |
| (specify): | | |
| Total | auto calculated | auto calculated |

b. [*If 5.1.2 is yes for first column (hydrogen)*] Report the quantity of **hydrogen** that your facility used in different processes in 2022. Include gas **from all sources**, including your facility's own production.

| | Quantity of <i>hydrogen</i> used by facility |
|--|---|
| Process that used hydrogen | (standard cubic feet) |
| Remelting and further working of previously cast semifinished/crude steel | |
| into different forms of semifinished/crude steel (e.g., electroslag remelting, | |
| vacuum arc remelting) | |
| Hot rolling flat steel products | |
| Cold rolling flat steel products | |
| Coating, cladding, or plating flat steel products | |
| Hot working long steel products | |
| Cold forming or cold finishing long steel products | |
| Production of seamless tubular products from a semifinished/crude steel | |
| substrate and any further working of unfinished tubular products | |
| Production of <u>non-seamless tubular products</u> from a flat steel substrate and | |
| any further working of unfinished tubular products | |
| Other processes used to make covered steel products or their upstream | |
| material inputs (specify): | |
| Processes used to make products other than covered steel products or their | |
| upstream material inputs (specify): | |
| Total | auto calculated |

c. [*If 5.1.2 is yes for first column (argon)*] Report the quantity of **argon** that your facility used in different processes in 2022. Include gas **from all sources**, including your facility's own production.

| | Quantity of <i>argon</i> used by facility (standard |
|---|--|
| Process that used argon | cubic feet) |
| Steelmaking, including BOF or EAF operations, preheating ferrous scrap, | |
| refining/ladle station, decarburization, and casting | |
| Other processes used to make covered steel products or their upstream | |
| material inputs (specify): | |
| Processes used to make products other than covered steel products or | |
| their upstream material inputs (specify): | |
| Total | auto calculated |

d. [In Q5.1.2, for any of the four gases, if facility responded yes for the first column and no for the second column (only gases where yes is selected in column 1 and column 2 is left empty will appear as rows)] Report the quantity of the following gases that your facility received **from** external sources, regardless of common ownership, in 2022.

| | Quantity received from external sources |
|--------|---|
| Gas | (standard cubic feet) |
| Oxygen | |
| Argon | |

| | Quantity received from external sources |
|----------|---|
| Gas | (standard cubic feet) |
| Nitrogen | |
| Hydrogen | |

Ferroalloys and other alloying metals

5.1.11

- a. [*If 5.1.1 is yes (ferroalloys and other alloying metals*)] Did your facility use <u>ferroalloys and other</u> <u>alloying metals</u> (not embodied in scrap nor used as a flux material, in coating, cladding, or plating) during the production of <u>stainless steel</u>, <u>carbon and other alloy steel</u>, or both types of steel in 2022?
 - o <u>Stainless steel</u>
 - Carbon and other alloy steel
 - o Both
- b. [*If responding "stainless steel" or "both" to 5.1.11a*] Report the quantity of <u>ferroalloys and other</u> <u>alloying metals</u> used by your facility to produce <u>semifinished/crude steel</u> in 2022.

| Туре | Quantity of <i>ferroalloys and other alloying metals</i> used by your facility for semifinished/crude steel production, by type ({metric tons/short tons}) |
|---|--|
| Ferrochromium | |
| Chromium metal | |
| Other forms of chromium (specify): | |
| Ferronickel | |
| Nickel metal | |
| Nickel pig iron | |
| Other forms of nickel (specify): | |
| Ferromanganese | |
| Manganese metal | |
| Ferromolybdenum | |
| Molybdenum metal | |
| Other forms of molybdenum | |
| (specify): | |
| Ferrosilicon | |
| Silicomanganese | |
| Silicon metal | |
| Ferrovanadium | |
| Aluminum metal | |
| Copper metal | |
| All other ferroalloys and other alloying metals | |
| (not embodied in scrap nor used as a flux | |
| material, in coating, cladding, or plating) | |

c. [*If responding "carbon and other alloy steel" only to 5.1.11a*] Report the quantity of <u>ferroalloys</u> <u>and other alloying metals</u> used by your facility to produce <u>semifinished/crude steel</u> in 2022.

| Туре | Quantity of <i>ferroalloys and other alloying metals</i> used by your facility for semifinished/crude steel production, by type ({metric tons/short tons}) |
|--|--|
| Ferrochromium | |
| Ferronickel | |
| Ferromanganese | |
| All other ferroalloys and other alloying | |
| metals (not embodied in scrap nor used as a | |
| flux material, in coating, cladding, or plating) | |

Direct reduced iron/hot briquetted iron

5.1.12

a. [*If 5.1.1 is yes (DRI or HBI)*] Report the quantity of <u>direct reduced iron (DRI)</u> and <u>hot briquetted</u> <u>iron (HBI)</u> that your facility used in different processes in 2022.

| | Quantity of DRI and HBI used by |
|---|--|
| Process that used DRI and/or HBI | <pre>facility ({metric tons/short tons})</pre> |
| Blast furnace operations, including pig iron casting | |
| Steelmaking, including BOF or EAF operations, preheating | |
| ferrous scrap, refining/ladle station, decarburization, and casting | |
| Other processes used to make covered steel products or their | |
| upstream material inputs (specify): | |
| Processes used to make products other than covered steel | |
| products or their upstream material inputs (specify): | |
| Total | auto calculated |

- b. [If a non-zero value is reported in question 5.1.12a for "Steelmaking" AND the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)] Do you know or have the ability to estimate the <u>carbon content</u> of the <u>DRI</u> and <u>HBI</u> that your facility used in electric arc furnaces in 2022?
 - o Yes
 - **No**
- c. [*If yes to 5.1.12b*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>DRI</u> and <u>HBI</u> that your facility used in electric arc furnaces in 2022.

d. [*If 5.1.1 is yes for DRI or HBI*] Report the quantity of <u>DRI</u> and <u>HBI</u> that your facility received from <u>external sources</u> (regardless of common ownership) in 2022, by source type. The source of DRI

and HBI is the facility that produced DRI and/or HBI through a direct reduction or HBI briquetting process.

| External source type | Quantity of <i>DRI and HBI</i> received by your facility from source ({metric tons/short tons}) |
|----------------------|--|
| U.S. sources | |
| Import sources | |
| Unknown sources | |
| Total | auto calculated |

e. [*If a non-zero value is reported in question 5.1.12d under "import sources"*] Report the quantity of **DRI and HBI** that your facility received in 2022 **from individual source countries**.

| | Quantity of imported DRI and HBI received by your facility from |
|-----------------------|---|
| Import source country | source country ({metric tons/short tons}) |
| Brazil | |
| Canada | |
| Malaysia | |
| Sweden | |
| Trinidad and Tobago | |
| All other or unknown | |
| Total | auto calculated |

Pig iron

5.1.13

a. [*If 5.1.2 is yes for pig iron in first column*] Report the quantity of **pig iron** (including solid and liquid/hot metal pig iron) that your facility used in different processes in 2022. Include pig iron **from all sources**, including your facility's own production.

| Process that used pig iron | Quantity of <i>pig iron/hot</i> <i>metal</i> used by facility ({metric tons/short tons}) |
|--|--|
| Steelmaking, including BOF or EAF operations, preheating ferrous | |
| scrap, refining/ladle station, decarburization, and casting | |
| Other processes used to make covered steel products or their | |
| upstream material inputs (specify): | |
| Processes used to make products other than covered steel products or | |
| their upstream material inputs (specify): | |
| Total | auto calculated |

b. [If a non-zero value is reported in question 5.1.13a for "Steelmaking" AND the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)] Do you know or have the ability to

estimate the <u>carbon content</u> of the <u>pig iron/hot metal</u> that your facility used in electric arc furnaces in 2022?

- o Yes
- **No**
- c. [*If yes to 5.1.13b*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>pig iron/hot metal</u> that your facility used in electric arc furnaces in 2022.
- d. [If 5.1.2 is yes for pig iron in column 1, and no selection in column 2] Report the quantity of pig iron that your facility received from external sources (regardless of common ownership) in 2022, by source type. The source of pig iron is the facility that produced pig iron in a <u>blast furnace</u> or <u>rotary hearth furnace</u>.

| | Quantity of <i>pig iron</i> received by your facility |
|----------------------|---|
| External source type | from source ({metric tons/short tons}) |
| U.S. sources | |
| Import sources | |
| Unknown sources | |
| Total | auto calculated |

e. [*If a non-zero value is reported in question 5.1.13d under "U.S. sources"*] Select the top five external U.S. source facilities that supplied the largest quantities of pig iron to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under tolling arrangements.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **pig iron** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **pig iron** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **pig iron** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **pig iron** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **pig iron** to your facility in 2022.

f. [*If any facilities are listed in 5.1.13e*] Report the quantity of **pig iron** that your facility received **from each of its top external U.S. source facilities** in 2022.

| Facility corporate name, city, state | Quantity of <i>pig iron</i> received from this facility ({metric tons/short tons}) |
|--------------------------------------|--|
| {Populate from 5.1.13e} | |

g. [*If a non-zero value is reported in question 5.1.13d under "import sources"*] Report the quantity of **pig iron** that your facility received in 2022 **from individual source countries**.

| | Quantity of imported <i>pig iron</i> received by your facility |
|-----------------------|--|
| Import source country | from source country ({metric tons/short tons}) |
| Brazil | |
| Canada | |
| China | |
| India | |
| Poland | |
| Qatar | |
| Russia | |
| South Africa | |
| Ukraine | |
| Vietnam | |
| All other or unknown | |
| Total | auto calculated |

Ferrous scrap

5.1.14

a. [*If 5.1.1 is yes for ferrous scrap*] Report the quantity of <u>ferrous</u> scrap that your facility used in basic oxygen furnaces or electric arc furnaces in 2022, including <u>home scrap</u> sourced from your own facility and <u>externally sourced scrap</u>.

| | Quantity of <i>ferrous scrap</i> used by facility in EAFs |
|---|---|
| Ferrous scrap type | or BOFs ({metric tons/short tons}) |
| Home scrap | |
| Externally sourced scrap | |
| Total ferrous scrap use in BOFs or EAFs | auto calculated |

- b. [If non-zero value is reported under the externally sourced scrap row of 5.1.14a] Do you know or have the ability to estimate the quantity of post-consumer scrap (a type of externally sourced scrap) that your facility used in basic oxygen furnaces or electric arc furnaces in 2022?
 - o Yes
 - 0 **No**
- c. [*If yes to 5.1.14b*] Estimate your facility's **post-consumer scrap** (as a percentage, e.g., "63" means 63 percent) of all **externally sourced scrap** used in BOFs or EAFs in 2022.
- d. [If non-zero value is reported under the home scrap row of 5.1.14a] Do you know or have the ability to estimate the quantity of <u>home scrap</u> generated before or during steel casting that your facility reused in basic oxygen furnaces or electric arc furnaces in 2022?
 - o Yes
 - 0 **No**
- e. [*If yes to 5.1.14d*] Estimate your facility's scrap generated before or during steel casting as a percentage share of all <u>home scrap</u> that your facility used in basic oxygen furnaces or electric arc furnaces in 2022 (e.g., "63" means 63 percent). _____
- f. [If 5.1.14a is greater than 0 AND the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)] Do you know or have the ability to estimate the <u>carbon content</u> of the <u>ferrous</u> scrap (from all sources) that your facility used in electric arc furnaces in 2022?
 - o Yes
 - 0 **No**
- g. [*If yes to 5.1.14f*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>ferrous</u> scrap that your facility used in electric arc furnaces in 2022.

Carbon electrodes

5.1.15

- a. [*If 5.1.1 is yes for carbon electrodes*] Report the quantity (in {metric tons/short tons}) of <u>carbon</u> <u>electrodes</u> that your facility used in 2022. _____
- b. [If a non-zero value is reported in question 5.1.15a AND the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)] Do you know or have the ability to estimate the <u>carbon content</u> of the <u>carbon electrodes</u> that your facility used in 2022?
 - o Yes
 - o No
- c. [*If yes to 5.1.15* b] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>carbon electrodes</u> that your facility used in 2022. _____
- d. [*If 5.1.1 is yes carbon electrodes*] Report the quantity of <u>carbon electrodes</u> that your facility received **from external sources** (regardless of common ownership) in 2022, by source type. The source of carbon electrodes is the facility that produced carbon electrodes.

| External source type | Quantity of <i>carbon electrodes</i> received by your facility from source ({metric tons/short tons}) |
|----------------------|--|
| U.S. sources | |
| Import sources | |
| Unknown sources | |
| Total | auto calculated |

e. [*If a non-zero value is reported in question 5.1.15d under "import sources"*] Report the quantity of <u>carbon electrodes</u> that your facility received in 2022 from individual source countries.

| Import source country | Quantity of imported <i>carbon electrodes</i> received by your facility from source country ({metric tons/short tons}) |
|-----------------------|--|
| import source country | |
| Austria | |
| China | |
| France | |
| India | |
| Italy | |
| Japan | |
| Malaysia | |
| Mexico | |
| Poland | |
| Russia | |
| All other or unknown | |
| Total | auto calculated |

Coating, cladding, and plating metals

5.1.16 [If 5.1.1 is yes for first column (coating, cladding, and plating metals)] Report the quantity of coating, cladding, and plating metals used by your facility to coat, clad, or plate steel products in 2022, by type of coating metal. If your facility used alloys (e.g., Galvalume, Galfan, etc.) that included any of the listed metals, report the quantity of the listed metal used based on the quantity of the alloy used multiplied by the percentage share of the metal within the alloy mixture. (Metals used in the steelmaking process should have been reported in response to question 5.1.11, not in response to this question.)

| Type of coating metal | Quantity of <i>coating,</i> <i>cladding, and plating</i> <i>metals</i> used for flat steel products ({metric tons/short tons}) | Quantity of <i>coating,</i> <i>cladding, and plating</i> <i>metals</i> used for long steel products ({metric tons/short tons}) | Quantity of <i>coating,</i> <i>cladding, and plating</i> <i>metals</i> used for tubular steel products ({metric tons/short tons}) |
|---------------------------|--|--|---|
| Zinc | | | |
| Aluminum | | | |
| Tin | | | |
| Chromium | | | |
| Copper | | | |
| Titanium | | | |
| Nickel | | | |
| Other metal (specify): | | | |

Steel products as production inputs

Semifinished/crude steel

5.1.17

a. [*Based on 5.1.3 being yes for first column (semifinished/crude steel)*] Report the quantity of semifinished/crude steel that your facility used in the production of other product categories (i.e., flat steel products, seamless steel tubular products, or long steel products) in 2022. Include semifinished/crude steel from all sources, including your facility's own production (whether originally cast or further manufactured by your facility) and <u>external sources</u>. Exclude from this table any quantity of semifinished/crude steel that your facility transformed into other forms of semifinished/crude steel (e.g., ingots transformed into slabs or billets) and did not further use to produce other product categories.

| | Quantity of <i>stainless</i> <u>semifinished/crude</u> <u>steel</u> used by facility | Quantity of <i>carbon and</i> other alloy <u>semifinished/crude</u> <u>steel</u> used by facility |
|--|--|--|
| Other products made by your facility using | ({metric tons/short | ({metric tons/short |
| semifinished/crude steel | tons}) | tons}) |
| Flat steel products | | |
| Seamless steel tubular products | | |
| Long steel products | | |

| Other non-covered product (if made directly from semifinished/crude steel without being first | | |
|---|-----------------|-----------------|
| transformed into another covered steel product) | | |
| Total | auto calculated | auto calculated |

 b. [If 5.1.3 is yes for first column and no selection for the second column (semifinished/crude steel)] Report the quantity of semifinished/crude steel from external sources (regardless of common ownership) that your facility used in the production of other forms of semifinished/crude steel in 2022. (Example: remelting externally sourced ingots to make other purified ingots, slabs, or billets). Report this quantity regardless of whether further-worked semifinished/crude steel was subsequently used in the production of other product categories (i.e., those listed in question 5.1.17a).

| Type of externally sourced semifinished/crude steel used | Quantity of externally sourced semifinished/crude steel used to make other forms of semifinished/crude steel ({metric tons/short tons}) |
|--|--|
| Stainless semifinished/crude steel | |
| Carbon and other alloy semifinished/crude steel | |
| Total | auto calculated |

 c. [If 5.1.3 is yes for first column and no selection for second column (semifinished/crude steel)] Report the quantity of <u>semifinished/crude steel</u> that your facility received from <u>external</u> <u>sources</u> (regardless of common ownership) in 2022, by source type.

| External source type | Quantity of <i>stainless</i> <u>semifinished/crude steel</u> received from source ({metric tons/short tons}) | Quantity of <i>carbon and other alloy</i> <u>semifinished/crude steel</u> received from source ({metric tons/short tons}) |
|----------------------|---|--|
| U.S. sources | | |
| Import sources | | |
| Unknown sources | | |
| Total | auto calculated | auto calculated |

d. [If 5.1.17c is a non-zero quantity for "U.S. sources" in either column] Select the top five <u>external</u>
 <u>U.S. source facilities</u> that supplied the largest quantities of <u>semifinished/crude steel</u> to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under <u>tolling</u> arrangements.

| U.S. source facility rank Facility's corporate name; city, s | |
|--|-------------|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **semifinished/crude steel** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **semifinished/crude steel** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **semifinished/crude steel** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **semifinished/crude steel** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **semifinished/crude steel** to your facility in 2022.

| Facility corporate name, city, state | Quantity of <i>stainless</i> <u>semifinished/crude steel</u> received from this facility ({metric tons/short tons}) | Quantity of <i>carbon and</i> other alloy <u>semifinished/crude steel</u> received from this facility ({metric tons/short tons}) |
|--------------------------------------|--|--|
| {Populate from 5.1.17d} | | |

e. [*If any facilities are reported in 5.1.17d*] Report the quantity of <u>semifinished/crude steel</u> that your facility received **from each of its top external U.S. source facilities** in 2022.

f. [If 5.1.17c is a non-zero quantity for "import sources" in the "stainless" column] Report the quantity of stainless semifinished/crude steel that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported stainless semifinished/crude steel from each country of melt and pour that was produced using BOF and EAF steelmaking processes.

| Country of melt and pour | Quantity of imported stainless semifinished/crude steel from country of melt and pour ({metric tons/short tons}) | Estimated share of imported stainless semifinished/crude steel from this country that was produced using BOF steelmaking (%) | Estimated share of imported stainless <u>semifinished/crude steel</u> from this country that was produced using EAF steelmaking (%) |
|-----------------------------|---|---|--|
| Australia | | | |
| Austria | | | |
| Canada | | | |
| China | | | |
| Germany | | | |
| India | | | |
| Indonesia | | | |
| Italy | | | |
| Korea | | | |
| Malaysia | | | |
| Spain | | | |
| Sweden | | | |
| Taiwan | | | |
| United Kingdom | | | |
| United States | | | |
| All other or unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

g. [If 5.1.17c is a non-zero quantity for "import sources" in the "carbon and other alloy" column] Report the quantity of carbon and other alloy semifinished/crude steel that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported carbon and other alloy semifinished/crude steel from each country of melt and pour that was produced using BOF and EAF steelmaking processes.

| Country of melt and pour | Quantity of imported carbon and other alloy <u>semifinished/crude</u> <u>steel</u> from country of melt and pour ({metric tons/short tons}) | Estimated share of imported <i>carbon and</i> <i>other alloy</i> <u>semifinished/crude steel</u> from this country that was produced using BOF steelmaking (%) | Estimated share of imported <i>carbon and</i> <i>other alloy</i> <u>semifinished/crude steel</u> from this country that was produced using EAF steelmaking (%) |
|-----------------------------|--|--|--|
| Australia | | | |
| Austria | | | |
| Brazil | | | |

| Canada | | | |
|----------------|-----------------|-----------------|-----------------|
| China | | | |
| Czech Republic | | | |
| Denmark | | | |
| France | | | |
| Germany | | | |
| India | | | |
| Italy | | | |
| Japan | | | |
| Mexico | | | |
| Romania | | | |
| Russia | | | |
| Spain | | | |
| Sweden | | | |
| Taiwan | | | |
| United Kingdom | | | |
| United States | | | |
| All other or | | | |
| unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

Hot-rolled flat steel products

5.1.18

a. [If 5.1.3 is yes for first column (hot-rolled flat steel products)] Report the quantity of hot-rolled flat steel products that your facility used in the production of other product categories (i.e., cold-rolled or coated flat steel products, non-seamless steel tubular products) in 2022. Include hot-rolled flat steel from all sources, including your facility's own production (whether originally rolled or further manufactured by your facility) and <u>external sources</u>. Exclude from this table any quantity of hot-rolled flat steel products that your facility transformed into other forms of hot-rolled flat steel products (e.g., hot band coils transformed into pickled hot-rolled steel) and did not further use to produce other product categories.

| Other products made by your facility using hot- rolled flat steel | Quantity of <i>stainless</i> <u>hot-rolled flat steel</u> used by facility ({metric tons/short tons}) | Quantity of <i>carbon</i> and other alloy <u>hot-</u> <u>rolled flat steel</u> used by facility ({metric tons/short tons}) |
|--|---|--|
| Cold-rolled flat steel products | | |
| Coated flat steel products that were not cold | | |
| rolled before coating | | |
| Non-seamless steel tubular products (e.g., welded, | | |
| open-seamed, riveted pipe and tube) | | |
| Other non-covered product (if made directly from | | |
| hot-rolled flat steel without being first | | |
| transformed into another covered steel product) | | |

| | Quantity of stainless | Quantity of carbon |
|---|-----------------------|-----------------------------|
| | hot-rolled flat steel | and other alloy <u>hot-</u> |
| | used by facility | rolled flat steel used |
| Other products made by your facility using hot- | ({metric tons/short | by facility ({metric |
| rolled flat steel | tons}) | tons/short tons}) |
| Total | auto calculated | auto calculated |

 b. [If 5.1.3 is yes for first column and no selection for second column (hot-rolled flat steel products)] Report the quantity of hot-rolled flat steel products from external sources (regardless of common ownership) that your facility used in the production of other forms of hot-rolled flat steel in 2022. (Example: your facility's pickling of externally sourced hot band coils). Report this quantity regardless of whether further-worked hot-rolled flat steel products were subsequently used in the production of other product categories (i.e., those listed in question 5.1.18a).

| Type of externally sourced hot-rolled flat steel used | Quantity of externally sourced <u>hot-rolled flat</u> <u>steel</u> used to make other forms of hot-rolled flat steel ({metric tons/short tons}) |
|--|---|
| Stainless hot-rolled flat steel | |
| Carbon and other alloy hot-rolled flat steel | |
| Total | auto calculated |

 c. [If 5.1.3 is yes for first column and no selection for second column (hot-rolled flat steel products)] Report the quantity of <u>hot-rolled flat steel products</u> that your facility received from <u>external</u> <u>sources</u> (regardless of common ownership) in 2022, by source type.

| External source type | Quantity of <i>stainless</i> <u>hot-rolled flat</u> <u>steel</u> received from source ({metric tons/short tons}) | Quantity of <i>carbon and other alloy</i> <u>hot-rolled flat steel</u> received from source ({metric tons/short tons}) |
|----------------------|--|--|
| U.S. sources | | |
| Import sources | | |
| Unknown sources | | |
| Total | auto calculated | auto calculated |

d. [If 5.1.18c is a non-zero quantity for "U.S. sources" in either column] Select the top five <u>external</u>
 <u>U.S. source facilities</u> that supplied the largest quantities of <u>hot-rolled flat steel products</u> to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under <u>tolling</u> arrangements.

| U.S. source facility rank | Facility's corporate name; city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **hot-rolled flat steel** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **hot-rolled flat steel** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **hot-rolled flat steel** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **hot-rolled flat steel** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **hot-rolled flat steel** to your facility in 2022.

| | | Quantity of |
|--------------------------------------|-----------------------|---------------------|
| | | carbon and other |
| | Quantity of stainless | alloy hot-rolled |
| | hot-rolled flat steel | flat steel received |
| | received from this | from this facility |
| | facility ({metric | ({metric |
| Facility corporate name; city, state | tons/short tons}) | tons/short tons}) |
| {Populate from 5.1.18d} | | |

e. [*If any facilities are reported in 5.1.18d*] Report the quantity of <u>hot-rolled flat steel products</u> that your facility received **from each of its top external U.S. source facilities** in 2022.

f. [If 5.1.18c is a non-zero quantity for "import sources" in the "stainless" column] Report the quantity of stainless hot-rolled flat steel products that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported stainless hot-rolled flat steel from each country of melt and pour that was produced using BOF and EAF steelmaking processes.

| Country of melt and pour | Quantity of imported stainless hot-rolled flat steel from country of melt and pour ({metric tons/short tons}) | Estimated share of imported stainless <u>hot-</u> <u>rolled flat steel</u> from this country that was produced using BOF steelmaking (%) | Estimated share of imported stainless <u>hot-</u> <u>rolled flat steel</u> from this country that was produced using EAF steelmaking (%) |
|-----------------------------|--|---|---|
| Austria | | steelinaking (70) | Steemaking (76) |
| Belgium | | | |
| Brazil | | | |
| Canada | | | |
| China | | | |
| France | | | |
| Germany | | | |
| India | | | |
| Indonesia | | | |
| Italy | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Netherlands | | | |
| Slovenia | | | |
| South Africa | | | |
| Sweden | | | |
| Taiwan | | | |
| United Kingdom | | | |
| United States | | | |
| All other or unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

g. [If 5.1.18c is a non-zero quantity for "import sources" in the "carbon and other alloy" column] Report the quantity of carbon and other alloy hot-rolled flat steel products that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported carbon and other alloy hot-rolled flat steel from each country of melt and pour that was produced using BOF and EAF steelmaking processes.

| | Quantity of imported | | Estimated share of |
|-----------------|------------------------------|--------------------------------|--------------------------------|
| | carbon and other | Estimated share of | imported carbon and |
| | alloy hot-rolled flat | imported carbon and | other alloy hot-rolled flat |
| | <u>steel</u> from country of | other alloy hot-rolled flat | <u>steel</u> from this country |
| | melt and pour | <u>steel</u> from this country | that was produced using |
| Country of melt | ({metric tons/short | that was produced using | EAF steelmaking (%) |
| and pour | tons}) | BOF steelmaking (%) | |

| Austria | | | |
|---------------|-----------------|-----------------|-----------------|
| Belgium | | | |
| Brazil | | | |
| Canada | | | |
| China | | | |
| Finland | | | |
| France | | | |
| Germany | | | |
| Indonesia | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Netherlands | | | |
| Russia | | | |
| Serbia | | | |
| Sweden | | | |
| Turkey | | | |
| Ukraine | | | |
| United States | | | |
| Vietnam | | | |
| All other or | | | |
| unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

Cold-rolled flat steel products

5.1.19

a. [*If 5.1.3 is yes for first column (cold-rolled flat steel products)*] Report the quantity of <u>cold-rolled</u> <u>flat steel products</u> that your facility **used in the production of other product categories** (i.e., coated flat steel products, non-seamless steel tubular products) in 2022. Include cold-rolled flat steel **from all sources**, including your facility's own production (whether originally rolled or further manufactured by your facility) and <u>external sources</u>. Exclude from this table any quantity of cold-rolled flat steel products that your facility transformed into other forms of cold-rolled flat steel products (e.g., cold-rolled steel transformed into another cold-rolled steel product through annealing) and did not further use to produce other product categories.

| Other products made by your facility using cold-rolled flat steel | Quantity of <i>stainless</i> <u>cold-rolled flat steel</u> used by facility ({metric tons/short tons}) | Quantity of <i>carbon</i> and other alloy <u>cold-</u> <u>rolled flat steel</u> used by facility ({metric tons/short tons}) |
|--|---|---|
| Coated flat steel products | | |
| Non-seamless steel tubular products (e.g., welded, open-seamed, riveted pipe and tube) | | |

| Other non-covered product (if made directly | | |
|---|-----------------|-----------------|
| from cold-rolled flat steel without being first | | |
| transformed into another covered steel product) | | |
| Total | auto calculated | auto calculated |

b. [If 5.1.3 is yes for first column and no selection for second column (cold-rolled flat steel products)] Report the quantity of cold-rolled flat steel products from external sources (regardless of common ownership) that your facility used in the production of other forms of cold-rolled flat steel in 2022. (Example: your facility's annealing of externally sourced cold-rolled steel). Report this quantity regardless of whether further-worked cold-rolled flat steel products were subsequently used in the production of other product categories (i.e., those listed in question 5.1.19a).

| Type of externally sourced cold-rolled flat steel used | Quantity of externally sourced <u>cold-rolled</u> <u>flat steel</u> used to make other forms of cold- rolled flat steel ({metric tons/short tons}) |
|---|--|
| Stainless cold-rolled flat steel | |
| Carbon and other alloy cold-rolled flat steel | |
| Total | auto calculated |

c. [*If 5.1.3 is yes for first column and no selection for second column (cold-rolled flat steel products)*] Report the quantity of <u>cold-rolled flat steel products</u> that your facility received <u>from external sources</u> (regardless of common ownership) in 2022, by source type.

| External source type | Quantity of <i>stainless</i> <u>cold-rolled</u> <u>flat steel</u> received from source ({metric tons/short tons}) | Quantity of <i>carbon and other alloy</i> <u>cold-rolled flat steel</u> received from source ({metric tons/short tons}) |
|----------------------|---|---|
| U.S. sources | | |
| Import sources | | |
| Unknown sources | | |
| Total | auto calculated | auto calculated |

d. [If 5.1.19c is a non-zero quantity for "U.S. sources" in either column] Select the top five <u>external</u>
 <u>U.S. source facilities</u> that supplied the largest quantities of <u>cold-rolled flat steel products</u> to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under <u>tolling</u> arrangements.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **cold-rolled flat steel** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **cold-rolled flat steel** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **cold-rolled flat steel** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **cold-rolled flat steel** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **cold-rolled flat steel** to your facility in 2022.

| Facility corporate name, city, state | Quantity of <i>stainless</i> <u>cold-</u> <u>rolled flat steel</u> received from this facility ({metric tons/short tons}) | Quantity of <i>carbon and</i> other alloy <u>cold-rolled flat</u> <u>steel</u> received from this facility ({metric tons/short tons}) |
|--------------------------------------|--|---|
| {Populate from 5.1.19d} | | |

e. [*If any facilities are reported in 5.1.19d*] Report the quantity of <u>cold-rolled flat steel</u> that your facility received **from each of its top external U.S. source facilities** in 2022.

f. [If 5.1.19c is a non-zero quantity for "import sources" in the "stainless" column] Report the quantity of stainless cold-rolled flat steel products that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported stainless cold-rolled flat steel from each country of melt and pour that was produced using BOF and EAF steelmaking processes.

| | Quantity of imported stainless <u>cold-rolled</u> <u>flat steel</u> from country | Estimated share of imported <i>stainless</i> <u>cold-</u> <u>rolled flat steel</u> from this | Estimated share of imported <i>stainless</i> <u>cold-</u> <u>rolled flat steel</u> from this |
|-----------------|--|--|--|
| Country of molt | of melt and pour ({metric tons/short | country that was | country that was |
| Country of melt | ({metric tons/short tons}) | produced using BOF | produced using EAF |
| and pour | tons}) | steelmaking (%) | steelmaking (%) |
| Belgium | | | |
| China | | | |
| Finland | | | |
| France | | | |
| Germany | | | |
| India | | | |
| Indonesia | | | |
| Italy | | | |
| Japan | | | |
| Korea | | | |
| Malaysia | | | |
| Mexico | | | |
| Slovenia | | | |
| South Africa | | | |
| Spain | | | |
| Sweden | | | |
| Taiwan | | | |
| Thailand | | | |
| United States | | | |
| Vietnam | | | |
| All other or | | | |
| unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

g. [If 5.1.19c is a non-zero quantity for "import sources" in the "carbon and other alloy" column] Report the quantity of carbon and other alloy cold-rolled flat steel products that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported carbon and other alloy cold-rolled flat steel from each country of melt and pour that was produced using <u>BOF</u> and <u>EAF</u> steelmaking processes.

| | Quantity of imported | Estimated share of | Estimated share of |
|-----------------|------------------------|------------------------------|------------------------------|
| | carbon and other alloy | imported carbon and other | imported carbon and other |
| | cold-rolled flat steel | alloy cold-rolled flat steel | alloy cold-rolled flat steel |
| | from country of melt | from this country that was | from this country that was |
| Country of melt | and pour ({metric | produced using BOF | produced using EAF |
| and pour | tons/short tons}) | steelmaking (%) | steelmaking (%) |
| Argentina | | | |

| Country of melt and pour | Quantity of imported carbon and other alloy <u>cold-rolled flat steel</u> from country of melt and pour ({metric tons/short tons}) | Estimated share of imported <i>carbon and other</i> <i>alloy</i> <u>cold-rolled flat steel</u> from this country that was produced using BOF steelmaking (%) | Estimated share of imported <i>carbon and other</i> <i>alloy</i> <u>cold-rolled flat steel</u> from this country that was produced using EAF steelmaking (%) |
|-----------------------------|---|---|---|
| Australia | | | |
| Austria | | | |
| Belgium | | | |
| Brazil | | | |
| Canada | | | |
| Germany | | | |
| India | | | |
| Indonesia | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Netherlands | | | |
| Russia | | | |
| Serbia | | | |
| Slovakia | | | |
| Sweden | | | |
| Taiwan | | | |
| Turkey | | | |
| Vietnam | | | |
| All other or unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

Coated flat steel products

5.1.20 [If 5.1.3 is yes for first column and no selection for second column (coated flat steel products)]

a. Report the quantity of <u>coated flat steel products</u> that your facility **used as substrate in the production of other products** in 2022. Only include material sourced **from** <u>external sources</u> (regardless of common ownership).

| Products made by your facility using coated flat steel | Quantity of externally sourced <u>coated flat steel</u> used by facility ({metric tons/short tons}) |
|--|--|
| Other forms of coated flat steel products | |
| Other non-covered product (if made directly from | |
| coated flat steel without being first transformed | |
| into another form of coated flat steel) | |
| Total | auto calculated |

b. Report the quantity of <u>coated flat steel products</u> that your facility received **from** <u>external</u> <u>sources</u> (regardless of common ownership) in 2022, by source type.

| | Quantity of carbon and other alloy coated flat steel received |
|----------------------|---|
| External source type | from source ({metric tons/short tons}) |
| U.S. sources | |
| Import sources | |
| Unknown sources | |
| Total | auto calculated |

c. [If 5.1.20b is a non-zero quantity for "U.S. sources"] Select the top five <u>external U.S. source</u> facilities that supplied the largest quantities of <u>coated flat steel products</u> to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under <u>tolling</u> arrangements.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second largest | {Drop down} |
| Third largest | {Drop down} |
| Fourth largest | {Drop down} |
| Fifth largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **coated flat steel** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **coated flat steel** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **coated flat steel** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **coated flat steel** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **coated flat steel** to your facility in 2022.

d. [*If any facilities are reported in 5.1.20c*] Report the quantity of <u>coated flat steel products</u> that your facility received **from each of its top external U.S. source facilities** in 2022.

| Facility corporate name, city, state | Quantity of <i>carbon and other alloy <u>coated flat</u> <u>steel</u> received from this facility ({metric tons/short tons})</i> |
|--------------------------------------|--|
| {Populate from 5.1.20c} | |

e. [*If 5.1.20b is a non-zero quantity for "import sources" in the "carbon and other alloy" column*] Report the quantity of <u>coated flat steel products</u> that your facility received from import sources in 2022, **by country of melt and pour**. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported coated flat steel from each country of melt and pour that was produced using <u>BOF</u> and <u>EAF</u> steelmaking processes.

| Country of melt and pour | Quantity of imported <u>coated flat steel</u> from country of melt and pour ({metric tons/short tons}) | Estimated share of imported <u>coated flat steel</u> from this country that was produced using BOF steelmaking (%) | Estimated share of imported <u>coated flat</u> <u>steel</u> from this country that was produced using EAF steelmaking (%) |
|--------------------------|--|---|--|
| Australia | | | |
| Austria | | | |
| Brazil | | | |
| Canada | | | |
| China | | | |
| France | | | |
| Germany | | | |
| India | | | |
| Indonesia | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Netherlands | | | |
| Russia | | | |
| Spain | | | |
| Taiwan | | | |
| Turkey | | | |
| United Kingdom | | | |
| United States | | | |
| Vietnam | | | |

| All other or unknown | | | |
|----------------------|-----------------|-----------------|-----------------|
| Total | auto calculated | auto calculated | auto calculated |

Seamless steel tubular products

- **5.1.21** [*If 5.1.3 is yes for first column and no selection for second column (seamless steel tubular products)*]
 - a. Report the quantity of <u>seamless steel tubular products</u> that your facility **used as substrate in the production of other products** in 2022. Only include material sourced **from** <u>external sources</u> (regardless of common ownership).

| Products made by your facility using seamless steel tubular products | Quantity of externally sourced stainless seamless steel tubular products used by facility ({metric tons/short tons}) | Quantity of externally sourced carbon and other alloy <u>seamless</u> <u>steel tubular products</u> used by facility ({metric tons/short tons}) |
|--|---|--|
| Other forms of seamless steel tubular products | | |
| (e.g., finished OCTG made from green tube) | | |
| Other non-covered product (if made directly | | |
| from seamless steel tubular products without | | |
| being first transformed into another form of | | |
| seamless steel tubular product) | | |
| Total | auto calculated | auto calculated |

b. Report the quantity of <u>seamless steel tubular products</u> that your facility received **from** <u>external</u> <u>sources</u> (regardless of common ownership) in 2022, by source type.

| | Quantity of <i>stainless</i> <u>seamless</u> <u>steel tubular products</u> received from source ({metric tons/short | Quantity of <i>carbon and other alloy</i> <u>seamless steel tubular products</u> received from source ({metric |
|----------------------|---|--|
| External source type | tons}) | tons/short tons}) |
| U.S. sources | | |
| Import sources | | |
| Unknown sources | | |
| Total | auto calculated | auto calculated |

c. [*If 5.1.21b is a non-zero quantity for "U.S. sources" in either column*] Select the top five <u>external</u>
 <u>U.S. source facilities</u> that supplied the largest quantities of <u>seamless steel tubular products</u> to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under <u>tolling</u> arrangements.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second largest | {Drop down} |
| Third largest | {Drop down} |

| Fourth largest | {Drop down} |
|----------------|-------------|
| Fifth largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **seamless steel tubular products** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **seamless steel tubular products** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **seamless steel tubular products** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **seamless steel tubular products** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **seamless steel tubular products** to your facility in 2022.

d. [*If any facilities are reported in 5.1.21c*] Report the quantity of <u>seamless steel tubular products</u> that your facility received **from each of its top external U.S. source facilities** in 2022.

| | | Quantity of <i>carbon and</i> other alloy <u>seamless</u> |
|--------------------------------------|------------------------|--|
| | Quantity of stainless | steel tubular products |
| | seamless steel tubular | received from this |
| | products received from | facility |
| | this facility ({metric | ({metric tons/short |
| Facility corporate name, city, state | tons/short tons}) | tons}) |
| {Populate from 5.1.21c} | | |
| | | |

e. [*If 5.1.21b is a non-zero quantity for "import sources" in the "stainless" column*] Report the quantity of <u>stainless seamless steel tubular products</u> that your facility received from import sources in 2022, **by country of melt and pour**. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your

facility's foreign sources, report the estimated shares of your facility's imported stainless seamless steel tubular products from each country of melt and pour that was produced using **BOF** and **EAF** steelmaking processes.

| | Quantity of imported stainless seamless steel | Estimated share of imported <i>stainless</i> seamless steel tubular | Estimated share of imported <i>stainless</i> seamless steel tubular |
|---------------------|--|---|---|
| | tubular products from | products from this | products from this |
| | country of melt and | country that was | country that was |
| Country of melt and | pour ({metric | , produced using BOF | produced using EAF |
| pour | tons/short tons}) | steelmaking (%) | steelmaking (%) |
| Austria | | | |
| Canada | | | |
| China | | | |
| Czech Republic | | | |
| France | | | |
| Germany | | | |
| India | | | |
| Indonesia | | | |
| Italy | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Spain | | | |
| Sweden | | | |
| Taiwan | | | |
| Thailand | | | |
| Ukraine | | | |
| United Kingdom | | | |
| United States | | | |
| Vietnam | | | |
| All other or | | | |
| unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

f. [If 5.1.21b is a non-zero quantity for "import sources" in the "carbon and other alloy" column] Report the quantity of carbon and other alloy seamless steel tubular products that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown country sources of melt and pour.") If you know your facility's foreign sources, report the estimated shares of your facility's imported carbon and other alloy seamless steel tubular products from each country of melt and pour that was produced using <u>BOF</u> and <u>EAF</u> steelmaking processes.

| Country of melt and pour | Quantity of imported carbon and other alloy seamless steel tubular products from country of melt and pour ({metric tons/short tons}) | Estimated share of imported <i>carbon and other</i> <i>alloy seamless steel tubular</i> <u>products</u> from this country that was produced using BOF steelmaking (%) | Estimated share of imported <i>carbon and other</i> <i>alloy seamless steel tubular</i> <u>products</u> from this country that was produced using EAF steelmaking (%) |
|-----------------------------|--|--|--|
| Argentina | | | |
| Austria | | | |
| Brazil | | | |
| China | | | |
| Czech Republic | | | |
| France | | | |
| Germany | | | |
| India | | | |
| Italy | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Oman | | | |
| Romania | | | |
| Russia | | | |
| Saudi Arabia | | | |
| South Africa | | | |
| Spain | | | |
| Thailand | | | |
| Ukraine | | | |
| All other or | | | |
| unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

Non-seamless steel tubular products

- **5.1.22** [*If 5.1.3 is yes for first column and no selection for second column (non-seamless steel tubular products)*]
 - a. Report the quantity of <u>non-seamless steel tubular products</u> that your facility **used as substrate** in the production of other products in 2022. Only include material sourced from <u>external</u> <u>sources</u> (regardless of common ownership).

| | Quantity of externally | Quantity of externally |
|---|--------------------------------------|---------------------------------|
| | sourced <i>stainless</i> <u>non-</u> | sourced carbon and other |
| | seamless steel | alloy <u>non-seamless steel</u> |
| | tubular products used | <u>tubular products</u> used by |
| Products made by your facility using non-seamless | by facility ({metric | facility ({metric |
| steel tubular products | tons/short tons}) | tons/short tons}) |

| Other forms of non-seamless steel tubular products | | |
|--|-----------------|-----------------|
| (e.g., finished OCTG made from green tube) | | |
| Other non-covered product (if made directly from | | |
| non-seamless steel tubular products without being | | |
| first transformed into another form of non- | | |
| seamless steel tubular product) | | |
| Total | auto calculated | auto calculated |

b. Report the quantity of <u>non-seamless steel tubular products</u> that your facility received **from** <u>external sources</u> (regardless of common ownership) in 2022, by source type.

| | Quantity of <i>stainless</i> <u>non-seamless</u> <u>steel tubular products</u> received from source ({metric tons/short | Quantity of <i>carbon and other alloy</i> non-seamless steel tubular products received from source ({metric |
|----------------------|---|---|
| External source type | tons}) | tons/short tons}) |
| U.S. sources | | |
| Import sources | | |
| Unknown sources | | |
| Total | auto calculated | auto calculated |

c. [*If 5.1.22b is a non-zero quantity for "U.S. sources" in either column*] Select the top five <u>external</u>
 <u>U.S. source facilities</u> that supplied the largest quantities of <u>non-seamless steel tubular products</u>
 to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under <u>tolling</u> arrangements.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **non-seamless steel tubular products** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **non-seamless steel tubular products** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **non-seamless steel tubular products** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **non-seamless steel tubular products** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **non-seamless steel tubular products** to your facility in 2022.

 d. [If any facilities are reported in 5.1.22c] Report the quantity of non-seamless steel tubular products that your facility received from each of its top external U.S. source facilities in 2022.

| | | Quantity of carbon and other |
|--------------------------------|---------------------------------|--------------------------------|
| | Quantity of stainless non- | alloy non-seamless steel |
| | seamless steel tubular products | tubular products received from |
| Facility corporate name, city, | received from this facility | this facility |
| state | ({metric tons/short tons}) | ({metric tons/short tons}) |
| {Populate from 5.1.22c} | | |

e. [*If 5.1.22b is a non-zero quantity for "import sources" in the "stainless" column*] Report the quantity of <u>stainless non-seamless steel tubular products</u> that your facility received from import sources in 2022, **by** <u>country of melt and pour</u>. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported stainless non-seamless steel tubular products from each country of melt and pour that was produced using <u>BOF</u> and <u>EAF</u> steelmaking processes.

| | | Estimated share of | Estimated share of |
|---------------------|------------------------|--------------------------------|--------------------------------|
| | Quantity of imported | imported <i>stainless</i> non- | imported <i>stainless</i> non- |
| | stainless non-seamless | seamless steel tubular | seamless steel tubular |
| | steel tubular products | products from this | products from this |
| | from country of melt | country that was | country that was |
| Country of melt and | and pour ({metric | produced using BOF | produced using EAF |
| pour | tons/short tons}) | steelmaking (%) | steelmaking (%) |
| Austria | | | |
| Belgium | | | |
| Brazil | | | |
| Canada | | | |
| China | | | |
| Costa Rica | | | |

| Finland | | | |
|----------------------|-----------------|-----------------|-----------------|
| Germany | | | |
| Guatemala | | | |
| India | | | |
| Indonesia | | | |
| Italy | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Russia | | | |
| Taiwan | | | |
| Turkey | | | |
| United States | | | |
| Vietnam | | | |
| All other or unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

f. [*If 5.1.22b in a non-zero quantity for "import sources" in the "carbon and other alloy" column*] Report the quantity of <u>carbon and other alloy non-seamless steel tubular products</u> that your facility received from import sources in 2022, **by** <u>country of melt and pour</u>. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported carbon and other alloy non-seamless steel tubular products from each country of melt and pour that was produced using <u>BOF</u> and <u>EAF</u> steelmaking processes.

| Country of melt and pour | Quantity of imported carbon and other alloy <u>non-seamless steel</u> <u>tubular products</u> from country of melt and pour ({metric tons/short tons}) | Estimated share of imported carbon and other alloy <u>non-</u> <u>seamless steel tubular</u> <u>products</u> from this country that was produced using BOF steelmaking (%) | Estimated share of imported carbon and other alloy <u>non-</u> <u>seamless steel tubular</u> <u>products</u> from this country that was produced using EAF steelmaking (%) |
|-----------------------------|--|---|---|
| Brazil | | | |
| Canada | | | |
| China | | | |
| Germany | | | |
| Greece | | | |
| India | | | |
| Italy | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Russia | | | |
| Saudi Arabia | | | |
| Taiwan | | | |

| Thailand | | | |
|----------------|-----------------|-----------------|-----------------|
| Turkey | | | |
| Ukraine | | | |
| United Arab | | | |
| Emirates | | | |
| United Kingdom | | | |
| United States | | | |
| Vietnam | | | |
| All other or | | | |
| unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

Hot-worked long steel products

5.1.23

a. [If 5.1.3 is yes for first column (hot-worked long steel products)] Report the quantity of hot-worked long steel products that your facility used in the production of other product categories (i.e., cold-formed/finished long steel products) in 2022. Include hot-worked long steel from all sources, including your facility's own production (whether originally hot-worked or further manufactured by your facility) and external sources. Exclude from this table any quantity of hot-worked long steel products that your facility transformed into other forms of hot-worked long steel products (e.g., wire rod transformed into another form of wire rod through straightening and cutting) and did not further use to produce other product categories.

| | Quantity of | Quantity of carbon |
|---|-----------------------|----------------------|
| | stainless <u>hot-</u> | and other alloy |
| | worked long steel | hot-worked long |
| | used by facility | <u>steel</u> used by |
| Other products made by your facility using hot-worked | ({metric tons/short | facility ({metric |
| long steel | tons}) | tons/short tons}) |
| Cold-formed/finished long steel products, including steel | | |
| wire | | |
| Other non-covered product (if made directly from hot- | | |
| worked long steel without being first transformed into a | | |
| cold-formed/finished long steel product) | | |
| Total | auto calculated | auto calculated |

 b. [If 5.1.3 is yes for first column and no for second column (hot-worked long steel products)] Report the quantity of hot-worked long steel products from external sources (regardless of common ownership) that your facility used in the production of other forms of hot-worked long steel in 2022. (Example: your facility's straightening and cutting of externally sourced wire rod). Report this quantity regardless of whether further-worked hot-worked long steel products were subsequently used in the production of other product categories (i.e., those listed in question 5.1.23a).

| Type of externally sourced hot-worked long steel used | Quantity of externally sourced <u>hot-worked</u> <u>long steel</u> used to make other forms of hot- worked long steel ({metric tons/short tons}) |
|--|---|
| Stainless hot-worked long steel | |
| Carbon and other alloy hot-worked long steel | |
| Total | auto calculated |

c. [If 5.1.3 is yes for first column and no for second column (hot-worked long steel products)]
 Report the quantity of hot-worked long steel products that your facility received from external sources (regardless of common ownership) in 2022, by source type.

| External source type | Quantity of <i>stainless</i> <u>hot-worked</u> <u>long steel</u> received from source ({metric tons/short tons}) | Quantity of <i>carbon and other alloy</i> <u>hot-worked long steel</u> received from source ({metric tons/short tons}) |
|----------------------|--|--|
| U.S. sources | | |
| Import sources | | |
| Unknown sources | | |
| Total | auto calculated | auto calculated |

d. [If 5.1.23c is a non-zero quantity for "U.S. sources" in either column] Select the top five <u>external</u>
 <u>U.S. source facilities</u> that supplied the largest quantities of <u>hot-worked long steel products</u> to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under <u>tolling</u> arrangements.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **hot-worked long steel products** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **hot-worked long steel** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **hot-worked long steel** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **hot-worked long steel** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **hot-worked long steel** to your facility in 2022.

e. [*If any facilities are reported in 5.1.23d*] Report the quantity of <u>hot-worked long steel products</u> that your facility received **from each of its top external U.S. source facilities** in 2022.

| Facility corporate name, city, state | Quantity of <i>stainless</i> <u>hot-</u> <u>worked long steel</u> received from this facility ({metric tons/short tons}) | Quantity of <i>carbon and other</i> <i>alloy</i> <u>hot-worked long steel</u> received from this facility ({metric tons/short tons}) |
|--------------------------------------|---|---|
| {Populate from 5.1.23d} | | |

f. [If 5.1.23c is a non-zero quantity for hot-rolled for "import sources" in the "stainless" column] Report the quantity of stainless hot-worked long steel products that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported stainless hot-worked long steel from each country of melt and pour that was produced using BOF and EAF steelmaking processes.

| | Quantity of imported stainless hot-worked long steel from | Estimated share of imported stainless <u>hot-</u> <u>worked long steel</u> from | Estimated share of imported stainless <u>hot-</u> worked long steel from |
|-----------------|---|---|--|
| Country of molt | country of melt and | this country that was | this country that was |
| Country of melt | pour ({metric | produced using BOF | produced using EAF |
| and pour | tons/short tons}) | steelmaking (%) | steelmaking (%) |
| Austria | | | |
| Belgium | | | |
| Brazil | | | |
| Canada | | | |
| China | | | |
| France | | | |
| Germany | | | |
| India | | | |
| Indonesia | | | |

| Italy | | | |
|----------------|-----------------|-----------------|-----------------|
| Japan | | | |
| Poland | | | |
| Slovenia | | | |
| Spain | | | |
| Sweden | | | |
| Switzerland | | | |
| Taiwan | | | |
| Ukraine | | | |
| United Kingdom | | | |
| United States | | | |
| All other or | | | |
| unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

g. [If 5.1.23c is a non-zero quantity for "import sources" in the "carbon and other alloy" column] Report the quantity of carbon and other alloy hot-worked long steel products that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported carbon and other alloy hot-worked long steel from each country of melt and pour that was produced using BOF and EAF steelmaking processes.

| Country of melt and pour | Quantity of imported carbon and other alloy <u>hot-worked long steel</u> from country of melt and pour ({metric tons/short tons}) | Estimated share of imported <i>carbon and other</i> <i>alloy</i> <u>hot-worked long steel</u> from this country that was produced using BOF steelmaking (%) | Estimated share of imported <i>carbon and other</i> <i>alloy <u>hot-worked long steel</u> from this country that was produced using EAF steelmaking (%)</i> |
|-----------------------------|--|--|---|
| Algeria | | | |
| Brazil | | | |
| Canada | | | |
| China | | | |
| Czech Republic | | | |
| Dominican | | | |
| Republic | | | |
| Egypt | | | |
| Germany | | | |
| India | | | |
| Japan | | | |
| Korea | | | |
| Luxembourg | | | |
| Malaysia | | | |
| Mexico | | | |
| Spain | | | |

| Country of melt | Quantity of imported carbon and other alloy <u>hot-worked long steel</u> from country of melt and pour ({metric | Estimated share of imported <i>carbon and other</i> <i>alloy</i> <u>hot-worked long steel</u> from this country that was produced using BOF | Estimated share of imported <i>carbon and other</i> <i>alloy <u>hot-worked long steel</u> from this country that was produced using EAF</i> |
|-------------------------|---|---|---|
| and pour | tons/short tons}) | steelmaking (%) | steelmaking (%) |
| Turkey | | | |
| United Arab | | | |
| Emirates | | | |
| United Kingdom | | | |
| United States | | | |
| Vietnam | | | |
| All other or unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

Cold-formed/finished long steel products

- 5.1.24 [*If* 5.1.3 *is yes for first column and no selection for second column (cold formed/finished long steel)*]
 - a. Report the quantity of <u>cold-formed/finished long steel products</u> that your facility **used as substrate in the production of other products** in 2022. Only include material sourced **from** <u>external sources</u> (regardless of common ownership).

| | Quantity of | Quantity of externally |
|---|------------------------|------------------------|
| | externally sourced | sourced carbon and |
| | stainless <u>cold-</u> | other alloy cold- |
| | formed/finished long | formed/finished long |
| | steel used by facility | steel used by facility |
| Products made by your facility using cold- | ({metric tons/short | ({metric tons/short |
| formed/finished long steel | tons}) | tons}) |
| Other forms of cold-formed/finished long steel | | |
| Other non-covered product (if made directly from | | |
| cold-formed/finished long steel without being first | | |
| transformed into another form of cold- | | |
| formed/finished long steel) | | |
| Total | auto calculated | auto calculated |

b. Report the quantity of <u>cold-formed/finished long steel products</u> that your facility received **from** <u>external sources</u> (regardless of common ownership) in 2022, by source type.

| | Quantity of <i>stainless</i> <u>cold-</u> <u>formed/finished long steel</u> received from source ({metric | Quantity of <i>carbon and other alloy</i> <u>cold-formed/finished long steel</u> received from source ({metric |
|----------------------|---|--|
| External source type | tons/short tons}) | tons/short tons}) |
| U.S. sources | | |
| Import sources | | |
| Unknown sources | | |

| Total auto calculated auto calculated |
|---------------------------------------|
|---------------------------------------|

c. [If 5.1.24b is a non-zero quantity for "U.S. sources" in either column] Select the top five <u>external</u> <u>U.S. source facilities</u> that supplied the largest quantities of <u>cold formed/finished long steel</u> <u>products</u> to your facility in 2022. Include purchases from unrelated facilities, transfers from external facilities that share common ownership, or transfers under <u>tolling</u> arrangements.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second largest | {Drop down} |
| Third largest | {Drop down} |
| Fourth largest | {Drop down} |
| Fifth largest | {Drop down} |

[*If "Other" selected as Largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **largest** quantity of **cold-formed/finished long steel** to your facility in 2022.

[*If "Other" selected as Second-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **second-largest** quantity of **cold-formed/finished long steel** to your facility in 2022.

[*If "Other" selected as Third-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **third-largest** quantity of **cold-formed/finished long steel** to your facility in 2022.

[*If "Other" selected as Fourth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fourth-largest** quantity of **cold-formed/finished long steel** to your facility in 2022.

[*If "Other" selected as Fifth-largest facility's corporate name*] Provide the corporate name and location (city, state) of the U.S. source facility that supplied the **fifth-largest** quantity of **cold-formed/finished long steel** to your facility in 2022.

d. [*If any facilities are reported in 5.1.24c*] Report the quantity of <u>cold-formed/finished long steel</u> <u>products</u> that your facility received **from each of its top external U.S. source facilities** in 2022.

| Facility corporate name, city, state | Quantity of <i>stainless</i> <u>cold-</u> <u>formed/finished long steel</u> received from this facility ({metric tons/short tons}) | Quantity of <i>carbon and other</i> <i>alloy</i> <u>cold-formed/finished long</u> <u>steel</u> received from this facility ({metric tons/short tons}) |
|--------------------------------------|---|--|
| {Populate from 5.1.24c} | | |
| {Populate from 5.1.24c} | | |
| {Populate from 5.1.24c} | | |

| Facility corporate name, city, state | Quantity of <i>stainless</i> <u>cold-</u> <u>formed/finished long steel</u> received from this facility ({metric tons/short tons}) | Quantity of <i>carbon and other</i> alloy <u>cold-formed/finished long</u> <u>steel</u> received from this facility ({metric tons/short tons}) |
|--------------------------------------|---|---|
| {Populate from 5.1.24c} | | |
| {Populate from 5.1.24c} | | |

e. [*If 5.1.24b is a non-zero quantity for "import sources" in the "stainless" column*] Report the quantity of <u>stainless cold-formed/finished long steel products</u> that your facility received from import sources in 2022, **by** <u>country of melt and pour</u>. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported stainless cold-formed/finished long steel from each country of melt and pour that was produced using <u>BOF</u> and <u>EAF</u> steelmaking processes.

| | Quantity of imported <i>stainless</i> <u>cold-</u> formed/finished long | Estimated share of imported <i>stainless</i> <u>cold-formed/finished</u> long steel from this | Estimated share of imported <i>stainless</i> <u>cold-formed/finished</u> long steel from this |
|----------------------|---|--|--|
| | steel from country of | country that was | country that was |
| Country of melt and | melt and pour ({metric | produced using BOF | produced using EAF |
| pour | tons/short tons}) | steelmaking (%) | steelmaking (%) |
| Austria | | | |
| Canada | | | |
| China | | | |
| Czech Republic | | | |
| France | | | |
| Germany | | | |
| India | | | |
| Indonesia | | | |
| Italy | | | |
| Japan | | | |
| Korea | | | |
| Mexico | | | |
| Slovakia | | | |
| Slovenia | | | |
| Spain | | | |
| Sweden | | | |
| Taiwan | | | |
| United Arab Emirates | | | |
| United Kingdom | | | |
| United States | | | |
| All other or unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

f. [If 5.1.24b is a non-zero quantity for "import sources" in the "carbon and other alloy" column] Report the quantity of carbon and other alloy cold-formed/finished long steel products that your facility received from import sources in 2022, by country of melt and pour. (If you do not know the country of melt and pour for any quantity of imported steel, or if you do not see the country of melt and pour listed in the table as an option, then report that quantity under "all other or unknown.") If you know your facility's foreign sources, report the estimated shares of your facility's imported carbon and other alloy cold-formed/finished long steel from each country of melt and pour that was produced using BOF and EAF steelmaking processes.

| | Quantity of imported <i>carbon and</i> other alloy <u>cold-</u> | Estimated share of imported <i>carbon and</i> | Estimated share of imported carbon and |
|-----------------|---|---|--|
| | formed/finished | other alloy <u>cold-</u> | other alloy <u>cold-</u> |
| | long steel from | formed/finished long | formed/finished long |
| | country of melt and | <u>steel</u> from this country | <u>steel</u> from this country |
| Country of melt | pour ({metric | that was produced using | that was produced using |
| and pour | tons/short tons}) | BOF steelmaking (%) | EAF steelmaking (%) |
| Austria | | | |
| Brazil | | | |
| Canada | | | |
| China | | | |
| Germany | | | |
| India | | | |
| Italy | | | |
| Japan | | | |
| Korea | | | |
| Malaysia | | | |
| Mexico | | | |
| Slovenia | | | |
| Spain | | | |
| Sweden | | | |
| Taiwan | | | |
| Turkey | | | |
| United Arab | | | |
| Emirates | | | |
| United Kingdom | | | |
| United States | | | |
| Vietnam | | | |
| All other or | | | |
| unknown | | | |
| Total | auto calculated | auto calculated | auto calculated |

Section 5.2 Uses and Sources of Production Inputs for Aluminum

5.2.1

a. [*If responding yes to primary unwrought aluminum production in Q.1.2.2*] Report the quantity of the following inputs that your facility used in production in 2022.

| | Quantity of material input used in 2022 |
|---|---|
| Material input | ({metric tons/short tons}) |
| Alumina | |
| Calcined petroleum coke | |
| Coal-tar pitch | |
| Carbon anodes (produced on-site) | |
| Carbon anodes (externally sourced) | |
| Alloying elements (not embodied in scrap) | |
| Scrap aluminum metal (externally sourced; | |
| excludes <u>runaround scrap</u>) | |
| Runaround scrap | |

- b. [*If a non-zero value is reported under the scrap aluminum metal row of 5.2.1a*] Do you know or have the ability to estimate the quantity of **post-consumer scrap** that your facility used as production inputs in 2022?
 - o Yes
 - o No
- c. [*If yes to 5.2.1b*] Estimate the share (as a percentage, e.g., "63" means 63 percent) of your facility's <u>externally sourced aluminum scrap metal</u> used as production inputs in 2022 that was <u>post-consumer scrap</u>.

5.2.2

a. [*If responding yes to secondary unwrought aluminum production, but no to wrought aluminum production, in Q.1.2.2*] Report the quantity of the following inputs that your facility used in production 2022.

| Material input | Quantity of material input used in 2022 ({metric tons/short tons}) |
|--|---|
| Primary unwrought aluminum | |
| Secondary unwrought aluminum (externally sourced) | |
| Alloying elements (not embodied in scrap) | |
| Scrap aluminum metal (externally sourced; excludes | |
| runaround scrap) | |
| Runaround scrap | |

- b. [*If a non-zero value is reported under the scrap aluminum metal row of 5.2.2 a*] Do you know or have the ability to estimate the quantity of **post-consumer scrap** that your facility used as production inputs in 2022?
 - o Yes
 - **No**

c. [*If yes to 5.2.2b*] Estimate the share (as a percentage, e.g., "63" means 63 percent) of your facility's <u>externally sourced aluminum scrap metal</u> used as production inputs in 2022 that was <u>post-consumer scrap</u>.

5.2.3

a. [*If responding yes to both secondary unwrought and wrought or to only wrought aluminum production in Q.1.2.2*] Report the quantity of the following inputs that your facility used in production in 2022.

| Material | Quantity of material input used in 2022 ({metric tons/short tons}) |
|--|---|
| Primary unwrought aluminum | |
| Secondary unwrought aluminum (produced on-site) | |
| Secondary unwrought aluminum (externally sourced) | |
| Alloying elements (not embodied in scrap) | |
| Scrap aluminum metal (externally sourced; excludes | |
| runaround scrap) | |
| Runaround scrap | |
| Wrought aluminum (externally sourced) | |

- b. [*If a non-zero value is reported under the scrap aluminum metal row of 5.2.3a*] Do you know or have the ability to estimate the quantity of **post-consumer scrap** that your facility used as production inputs in 2022?
 - o Yes
 - 0 **No**
- c. [*If yes to 5.2.3b*] Estimate the share (as a percentage, e.g., "63" means 63 percent) of your facility's <u>externally sourced aluminum scrap metal</u> used as production inputs in 2022 that was <u>post-consumer scrap</u>. ______

Alumina

- 5.2.4
 - a. [*If alumina quantity is nonzero in Q5.2.1*] Report the quantity of **alumina** that your facility used in production from <u>external sources</u> in 2022. The source of alumina is the facility that produced the alumina (i.e., via the Bayer process).

| Source | Quantity of <i>alumina</i> received by your facility, by source ({metric tons/short tons}) |
|-----------------|---|
| Source | source ({metric tons/short tons}) |
| U.S. sources | |
| Import sources | |
| Unknown sources | |
| Total | auto calculated |

b. [*If a non-zero value is reported in question 5.2.4a under "import sources"*] Report the quantity of alumina that your facility received in 2022 from individual source countries.

| Source country | Quantity of <i>alumina</i> received by your facility from this source ({metric tons/short tons}) |
|------------------------------|---|
| | |
| Australia | |
| Brazil | |
| Canada | |
| China | |
| India | |
| Jamaica | |
| Spain | |
| All other sources or unknown | |
| Total | auto calculated |

Primary unwrought aluminum

5.2.5

- a. [If responding yes in Q1.2.2 to
 - only secondary unwrought aluminum production;
 - secondary unwrought aluminum production AND wrought production;
 - only wrought production;

and primary unwrought aluminum is nonzero in Q5.2.2 or Q5.2.3] Report the quantity of **primary unwrought aluminum from external sources** (regardless of common ownership) that your facility used in the production of other aluminum products in 2022.

- If your facility uses primary unwrought aluminum to make <u>secondary unwrought</u> <u>aluminum</u> that is further worked within the facility to a <u>wrought product</u>, the primary unwrought aluminum should be allocated to the secondary unwrought aluminum row, and not the further downstream wrought product.
- Similarly, if your facility uses primary unwrought aluminum to make a wrought aluminum product that is further worked within the facility to a non-covered product, the primary unwrought aluminum should be allocated to the wrought aluminum row and not the further downstream non-covered product.

| Products made by your facility using primary unwrought aluminum | Quantity of externally sourced <i>primary</i> <i>unwrought aluminum</i> used by facility ({metric tons/short tons}) |
|---|---|
| Secondary unwrought aluminum | |
| Wrought aluminum | |
| Other (non-covered) product | |

b. [If primary unwrought aluminum is nonzero in Q5.2.2 or Q5.2.3] Report the quantity of primary unwrought aluminum that your facility received from external sources (regardless of common ownership) in 2022, by source type.

| | Quantity of primary unwrought aluminum received from |
|-----------------|--|
| Source | source ({metric tons/short tons}) |
| U.S. sources | |
| Import sources | |
| Unknown sources | |
| Total | auto calculated |

c. [*If 5.2.5b is a non-zero quantity for "U.S. sources"*] Select the top 5 external U.S. source facilities that supplied the largest quantities of primary unwrought aluminum to your facility in 2022. Include purchases and transfers from external facilities regardless of common ownership.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |

d. [*If any facilities are reported in 5.2.5c and if the value is nonzero for primary unwrought aluminum in 5.2.3*] Report the quantity of **primary unwrought aluminum** that your facility received from each of its top **external U.S. source facilities** in 2022.

| Facility's corporate name, city, state | Quantity of <i>primary unwrought aluminum</i> received from this facility ({metric tons/short tons}) |
|--|--|
| {Populate from 5.2.5c} | |

e. [*If 5.2.5b is a non-zero quantity for "import sources" for primary unwrought aluminum*] Report the quantity of primary unwrought aluminum that your facility received from import sources in 2022, by <u>country of smelt</u>. The country of smelt is defined as the country where the new aluminum metal is produced from alumina (refined aluminum oxide) by the electrolytic Hall-Héroult process.

| | Quantity of primary unwrought aluminum received from this |
|------------------|---|
| Country of smelt | country ({metric tons/short tons}) |
| Argentina | |
| Australia | |
| Bahrain | |
| Canada | |
| India | |

| Qatar | |
|----------------------|-----------------|
| Russia | |
| South Africa | |
| United Arab Emirates | |
| All other or unknown | |
| Total | auto calculated |

Secondary unwrought aluminum

5.2.6

- a. [If responding yes to only secondary unwrought aluminum production or secondary and wrought aluminum production, or only to wrought production in Q.1.2.2 and external secondary unwrought aluminum is nonzero in Q5.2.2 or Q5.2.3] Report the quantity of secondary unwrought aluminum that your facility received from external sources (regardless of common ownership) in 2022 and then used to produce other forms of secondary unwrought aluminum (e.g., extrusion billet produced using externally sourced remelt scrap ingot (RSI), even if that extrusion billet is further worked on-site). _____
- b. [If responding yes to only secondary unwrought aluminum production or secondary and wrought aluminum production, or only to wrought production in Q.1.2.2 and external secondary unwrought aluminum is nonzero in Q5.2.2 or Q5.2.3] Report the quantity of <u>all secondary unwrought aluminum</u> that your facility used as a substrate in the production of wrought aluminum and/or other non-covered products in 2022.
 - Include both secondary unwrought aluminum received by <u>other facilities</u> (regardless of common ownership) and/or produced by the facility itself, including any secondary unwrought aluminum further processed from externally sourced secondary unwrought aluminum (e.g., extrusion billet produced on-site using externally sourced RSI and then further worked on-site).
 - If your facility uses secondary unwrought aluminum to produce <u>wrought aluminum</u> that is then used to make other non-covered products, allocate the quantity of secondary unwrought aluminum used in that production within the wrought aluminum row, not the other non-covered product row.

| Products made by your facility using secondary unwrought aluminum | Quantity of <i>secondary unwrought</i> <i>aluminum</i> used by facility ({metric tons/short tons}) |
|--|--|
| Wrought aluminum | |
| Other non-covered product (if made directly from secondary unwrought aluminum without being first transformed into a covered wrought aluminum product) | |
| Total | auto calculated |

c. [*If external secondary unwrought aluminum is nonzero in Q5.2.2 or Q5.2.3*] Report the quantity of <u>secondary unwrought aluminum</u> that your facility received **from <u>external sources</u>** (regardless of common ownership) in 2022, by source type. Do not include secondary unwrought aluminum produced at the facility covered in this questionnaire response.

| | Quantity of secondary unwrought aluminum received |
|-----------------|---|
| Source | from source ({metric tons/short tons}) |
| U.S. sources | |
| Import sources | |
| Unknown sources | |
| Total | auto calculated |

d. [If 5.2.6c is a non-zero quantity for "U.S. sources" in second column] Select the top external U.S. source facilities that supplied the largest quantities of <u>secondary unwrought aluminum</u> to your facility in 2022. Include purchases and transfers from <u>external facilities</u> regardless of common ownership.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |
| Sixth-largest | {Drop down} |
| Seventh-largest | {Drop down} |
| Eighth-largest | {Drop down} |
| Ninth-largest | {Drop down} |
| Tenth-largest | {Drop down} |

e. [*If any facilities are reported in 5.2.6d and if the value is nonzero for primary unwrought aluminum in 5.2.3*] Report the quantity of <u>secondary unwrought aluminum</u> that your facility received from each of its top **external U.S. source facilities** in 2022.

| | Quantity of <i>secondary unwrought aluminum</i> received from this facility ({metric tons/short |
|--|--|
| Facility's corporate name, city, state | tons}) |
| {Populate from 5.2.6d} | |

{Populate from 5.2.6d}

f. [If 5.2.6c is a non-zero quantity for "import sources" of secondary unwrought aluminum] Estimate the share of each type and source of imports of aluminum metal as a percentage of all aluminum metal inputs that were used in the production of <u>secondary unwrought aluminum</u> that your facility received from import sources in 2022. The source of <u>primary unwrought</u> aluminum, known as the "country of smelt," is the country where the new aluminum metal is produced from alumina (refined aluminum oxide) by the electrolytic Hall-Héroult process. <u>Hover</u> for example. {Example text: For example if you imported 100 metric tons of secondary unwrought aluminum and you estimate that 5 percent of that aluminum metal is composed of primary unwrought aluminum that was originally smelted in Canada, and 5 percent of that aluminum is primary unwrought aluminum that was originally smelted in Russia, and the remaining 90 percent was sourced from scrap aluminum, enter 5 percent for primary unwrought aluminum from Canada, 5 percent for primary unwrought aluminum from Russia, and 90 percent for scrap aluminum from all sources.}

| Type of aluminum metal | Source of aluminum metal | Estimated share of aluminum metal used in production of your facility's imported secondary unwrought aluminum (%) |
|------------------------------|-----------------------------|---|
| Scrap aluminum | All sources | |
| Primary unwrought aluminum | Argentina | |
| Primary unwrought aluminum | Australia | |
| Primary unwrought aluminum | Bahrain | |
| Primary unwrought aluminum | Canada | |
| Primary unwrought aluminum | India | |
| Primary unwrought aluminum | Qatar | |
| Primary unwrought aluminum | Russia | |
| Primary unwrought aluminum | South Africa | |
| Primary unwrought aluminum | United Arab Emirates | |
| All other or unknown type of | All other sources | |
| aluminum metal | | |
| Total | | auto calculated |

Wrought aluminum

5.2.7

a. [If responding yes to secondary unwrought aluminum production AND wrought production or to only wrought production in Q.1.2.2 and wrought aluminum is nonzero in Q5.2.3] Report the quantity of wrought aluminum that your facility used as a substrate in the production of other products in 2022. Only include material sourced from external sources (regardless of common ownership.)

| Products made by your facility using wrought aluminum | Quantity of externally sourced <i>wrought</i> aluminum used by facility ({metric tons/short tons}) |
|---|--|
| Other forms of wrought aluminum, whether or not subsequently transformed into other goods | |
| Non-covered products that have not first been made into another form of wrought aluminum within your facility | |

b. [If wrought aluminum is nonzero in Q5.2.3] Report the quantity of wrought aluminum that your facility received from external sources (regardless of common ownership) in 2022, by source type. Do not include wrought aluminum that was both produced and internally consumed by the facility to make other wrought products covered in this questionnaire.

| | Quantity of wrought aluminum received from this |
|-----------------|---|
| Source | source ({metric tons/short tons}) |
| U.S. sources | |
| Import sources | |
| Unknown sources | |
| Total | auto calculated |

c. [*If 5.2.7b is a non-zero quantity for "U.S. sources" in second column*] Select the top external U.S. source facilities that supplied the largest quantities of <u>wrought aluminum</u> to your facility in 2022. Include purchases and transfers **from <u>external facilities</u>** regardless of common ownership.

| U.S. source facility rank | Facility's corporate name, city, state |
|---------------------------|--|
| Largest | {Drop down} |
| Second-largest | {Drop down} |
| Third-largest | {Drop down} |
| Fourth-largest | {Drop down} |
| Fifth-largest | {Drop down} |
| Sixth-largest | {Drop down} |
| Seventh-largest | {Drop down} |
| Eighth-largest | {Drop down} |
| Ninth-largest | {Drop down} |
| Tenth-largest | {Drop down} |

 d. [If any facilities are reported in 5.2.7c and if there is a non-zero value for wrought in 5.2.3] Report the quantity of wrought aluminum that your facility received from each of its top <u>external U.S. source</u> facilities in 2022.

| | Quantity of wrought aluminum received from |
|--|--|
| Facility's corporate name, city, state | this facility ({metric tons/short tons}) |
| {Populate from 5.2.7d} | |

| {Populate from 5.2.7d} | |
|------------------------|--|
| {Populate from 5.2.7d} | |

e. [*If 5.2.7b is a non-zero quantity for "import sources" for wrought*] Estimate the quantity of each type and source of aluminum metal as a percentage of all aluminum metal inputs that were used in the production of <u>wrought aluminum</u> that your facility received **from import sources** in 2022. The source of <u>primary unwrought aluminum</u>, known as the "<u>country of smelt</u>," is the country where the new aluminum metal is produced from alumina (refined aluminum oxide) by the electrolytic Hall-Héroult process. {*Example text: For example if you imported 100 metric tons of secondary unwrought aluminum and you estimate that 5 percent of that aluminum metal is composed of primary unwrought aluminum that was originally smelted in Canada, and 5 percent of that aluminum is primary unwrought aluminum that was originally smelted in China, and the remaining 90 percent was sourced from scrap aluminum, enter 5 percent for primary unwrought aluminum from Canada, 5 percent for primary unwrought aluminum from China, and 90 percent for scrap aluminum from all sources.}*

| Type of aluminum metal | Source of aluminum metal | Estimated share of aluminum metal used in production of your facility's imported <i>wrought aluminum</i> (%) |
|------------------------------|-----------------------------|--|
| Scrap aluminum | All sources | |
| Primary unwrought aluminum | Australia | |
| Primary unwrought aluminum | Bahrain | |
| Primary unwrought aluminum | Brazil | |
| Primary unwrought aluminum | Canada | |
| Primary unwrought aluminum | China | |
| Primary unwrought aluminum | India | |
| Primary unwrought aluminum | Malaysia | |
| Primary unwrought aluminum | Oman | |
| Primary unwrought aluminum | South Africa | |
| Primary unwrought aluminum | United States | |
| All other or unknown type of | All other sources | |
| aluminum metal | | |
| Total | | auto calculated |

SECTION 6. Additional Questions Related to Process Emissions

As with the entirety of your response, answers to the questions in this section will be treated as confidential business information. To download a copy of our confidentiality statement, click <u>here</u>.

- **6.1** [*If the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)*]
 - a. Report the quantity (in {metric tons/short tons}) of molten steel produced by electric arc furnaces in 2022. _____
 - b. Do you know or have the ability to estimate the <u>carbon content</u> of the **molten steel** produced by electric arc furnaces in 2022?
 - o Yes
 - o **No**
 - c. [*If yes to 6.1b*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the **molten steel** after EAF production in 2022._____
 - d. Report the quantity (in {metric tons/short tons}) of **molten steel** charged into <u>decarburization</u> vessels (e.g., argon oxygen decarburization vessels) in 2022.____
 - e. Do you know or have the ability to estimate the <u>carbon content</u> of the **molten steel** before and after <u>decarburization</u> in 2022?
 - o Yes
 - **No**
 - f. [*If yes to 6.1e*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the **molten steel** before and after <u>decarburization</u> in 2022.

| Timeframe | Estimated carbon content of molten steel (%) |
|------------------------|--|
| Before decarburization | |
| After decarburization | |

- **6.2** [If the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)]
 - a. Did your facility collect <u>air pollution control residue</u> from electric arc furnaces and/or <u>decarburization</u> vessels (e.g., argon oxygen decarburization vessels) in 2022?
 - o Yes
 - 0 **No**
 - b. [*If yes to 6.2a*] Report the quantity (in {metric tons/short tons}) of your facility's <u>air pollution</u> <u>control residue</u> collected from these processes in 2022. _____
 - c. [*If yes to 6.2a*] Do you know or have the ability to estimate the <u>carbon content</u> of the <u>air pollution</u> <u>control residue</u> that your facility produced in electric arc furnaces and <u>decarburization</u> vessels in 2022?

- o Yes
- o No
- d. [*If yes to 6.2c*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>air pollution control residue</u> that your facility produced in electric arc furnaces and <u>decarburization</u> vessels in 2022.____
- **6.3** [*If the facility is an EAF reporter (based on response to question 1.2.2) that does not report under the GHGRP (based on responses to company-level questions 1.1.3 and 1.1.6)*]
 - a. Report the quantity (in {metric tons/short tons}) of your facility's production of <u>slag</u> from its electric arc furnaces in 2022.
 - b. Do you know or have the ability to estimate the <u>carbon content</u> of the <u>slag</u> that your facility produced in electric arc furnaces in 2022?
 - o Yes
 - **No**
 - c. [*If yes to 6.3b*] Estimate the average <u>carbon content</u> (as a percentage, e.g., "63" means 63 percent) of the <u>slag</u> that your facility produced in electric arc furnaces in 2022._____

SECTION 7. Other Information (OPTIONAL)

As with the entirety of your response, answers to the questions in this section will be treated as confidential business information. To download a copy of our confidentiality statement, click <u>here</u>.

7.1 If your facility or company collects information on its GHG emissions at a corporate, facility, or product level and reports it publicly—e.g., in annual environmental, social, and governance (ESG) reports, environmental product declarations (EPDs), etc.—in a way that would be helpful to the Commission for the purposes of this investigation, you may share this information in one or both of the following ways

- a. Paste URL links to these reports in the textbox below.
- b. Attach these reports as a PDF. <u>Note that you are only permitted to upload a single file if you have multiple documents to share, please combine them into one PDF file.</u>

7.2 To the extent you have this information available, report the **actual embodied GHG emission factors** for **covered material inputs** that your facility received **from** <u>external sources</u> (regardless of common ownership) and used in the production of <u>covered steel and aluminum products</u> in 2022. Actual embodied GHG emission factors should correspond with the input categories and external sources covered in your responses to section 5 of the questionnaire. These emission factors should be based on suppliers' measured (e.g., using a continuous emission monitoring system) or calculated (e.g., using a mass balance approach) GHG emissions attributed to the products they produce. Many facilities will not have access to such information from some or all of their suppliers, so reporting of this information is optional. The Commission will assess the use of such information along with other default <u>scope 3</u> emission factors (e.g., published or third-party provided emission factors) based on the quality and comprehensiveness of the data received. As with other data collected in this questionnaire, the Commission will not use or publish this information if doing so would reveal confidential business information.

- a. Report the actual embodied GHG emission factors corresponding with the input categories and external sources covered in your responses to section 5 of the questionnaire. Each reported emission factor should include the following information:
 - Input category: The material or product received by your facility as an input. Input categories should be based on the categories of inputs for which data was requested in section 5 of the questionnaire.
 - **External source:** Identification of the source of those inputs covered by the emission factor. External sources should match those identified in section 5 of the questionnaire for corresponding inputs, or should be aggregates of those sources (e.g., all global sources).
 - **Unit of measure:** Specify the unit of measure for inputs received from the source (e.g., metric tons or short tons for solid materials, standard cubic feet for gases).
 - **Emission factor:** GHG emission factors should be reported in metric tons of <u>carbon dioxide</u> <u>equivalents</u> (mt CO₂e) per unit of inputs received by your facility.

• Share of inputs received: For each input category from a specific external source, report the share of inputs received from that source covered by the emission factor.

| Input category | External source or source type | Unit of measure for inputs received from source | Actual embodied GHG emission factor for material received from source (metric tons of carbon dioxide equivalents per unit of measure) | Share of inputs received from this source covered by this emission factor (%) |
|-------------------|--------------------------------------|---|---|---|
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- In a PDF attachment, provide any additional emission factors not covered in your response to question 7.2a above using the same format as the table in that question. Also provide additional documentation related to all emission factors reported that should include:
- Whether scopes 1, 2 and 3 are included: Identify whether the reported emission factors include all emissions attributable to processes under your immediate suppliers' operational control that generate direct combustion and process emissions (suppliers' scope 1 emissions) as well as those upstream of your suppliers, such as your supplier's purchases of energy (suppliers' scope 2 emissions) and other material inputs (suppliers' scope 3 emissions).
- GHG emissions included: Identify the specific greenhouse gases included within the measure of carbon dioxide equivalents. If gases other than carbon dioxide are included, specify the global warming potential (GWP) factors used to convert those gases into carbon dioxide equivalents. (The GWP factors under the GHGRP are available in table A-1 to subpart A of 40 C.F.R. § 98.)
- <u>System boundary</u> consistency: Identify whether the reported emission factors use consistent system boundaries and incorporate all <u>cradle-to-gate</u> processes used to produce the input (including the materials going into the input). Cradle-to-gate processes of interest to the Commission include those used to produce materials/products listed in questions 5.1.1–5.1.3 (for steel producers) or 5.2.1–5.2.3 (for aluminum producers); mining; and production of natural gas and coal.
- **Specific inclusions/exclusions:** To the extent practicable, identify whether the reported emission factors include or exclude emissions attributable to the following processes. If these processes are included, provide an estimate of the share of the emission factor accounted for by the inclusion of the process. (Characterization of this share as "negligible" or "<1%" is acceptable).
 - Site-to-site transportation
 - On-site use of mobile equipment
 - Mining of raw materials used in the production of the input
 - <u>Fugitive emissions</u> from the mining and production of natural gas and/or coal
 - Emission reductions or credits attributed to wastes, scrap, or byproducts (materials that are not economic drivers of the production process) produced during the manufacturing of the input
 - Emission credits attributed to the export of <u>waste gases</u> from the facility
 - Processing or distribution of scrap or waste
- Use of default emission factors: Report the estimated share of the reported embodied GHG emission factor that was based on the use of default upstream emission factors as opposed to measurement or calculation performed by your upstream supplier(s).

- Any additional explanation of the methods used to gather the reported embodied GHG emission factors, to the extent you believe it would be helpful to the Commission for purposes of understanding these data.
- 7.3 If you would like to explain any of your responses about your facility in this questionnaire, use the space below. As with all answers to this questionnaire, your explanation will be confidential and will be referenced only if we can ensure anonymity.

SECTION 8. Certification

The undersigned certifies that the information supplied herein in response to this questionnaire is complete and accurate to the best of the certifier's knowledge and belief. Section 332(g) of the Tariff Act of 1930 (19 U.S.C. § 1332(g)) provides that the Commission may not release information that it considers to be confidential business information unless the party submitting such information had notice, at the time of submission, that such information would be released by the Commission, or such party subsequently consents to the release of the information.

The undersigned acknowledges that all information, including confidential business information, submitted in this questionnaire response and throughout this investigation may be disclosed to and used by:

(i) the Commission, its employees and offices, and contract personnel

- (a) for developing or maintaining the records of this or a related proceeding, or
- (b) in internal investigations, audits, reviews, and evaluations relating to the programs,
- personnel, and operations of the Commission, including under 5 U.S.C. Appendix 3; or
- (ii) U.S. government employees and contract personnel
 - (a) for cybersecurity and other security purposes, or
 - (b) in monitoring user activity on U.S. government classified networks.

The undersigned understands that all contract personnel will sign appropriate nondisclosure agreements. The Commission will not disclose any confidential business information, unless such information is otherwise available to the public. The Trade Representative has asked that the Commission not include any confidential business information in the report it transmits to the Trade Representative. The Commission may aggregate the information you provide with information from other questionnaire responses, but the Commission will not publish information obtained from your questionnaire or an aggregation of your and other questionnaire responses in a manner that would identify your company/facility or reveal the operations of your company/facility.

| Certifier's name and title | Date of certification |
|----------------------------|-----------------------|

Check the box below in place of a written signature to indicate that the authorized official listed above has certified the information provided.

Certified

Before submitting your facility's completed questionnaire, report the actual number of hours required and the cost to your facility of completing this questionnaire, including all preparatory activities.

Number of hours: _____ Cost (\$): ____