

## Instructions for Applicants

User Input

Calculated or from other tab

Instructions are in yellow boxes

This worksheet is used to capture information on Critical Material project proposals. Input data and out the relevant user input (green) cells in the *Project Overview* tab. Data will be extracted from this

Section	Applicant Information	Input
Project Overview	Applicant Control Number	
	Company Name	
	City (HQ)	
	State (HQ)	
	Zip Code (HQ)	
	City (Facility)	
	State (Facility)	
	Zip Code (Facility)	
	Qualified Investment (\$)	
	Expected Credit Rate	
	Tax Credit (\$)	\$0.00
Project Type		

es next to the corresponding inputs

assumptions should be substantiated in and show clear correspondence to applicant's project narrative. Applicant's workbook to compare submissions. **Therefore, no cells, rows, or columns should be added.**

Units	Notes
	The control number used to track the application in the DOE 48C application portal
	Dollar amount of the qualified investment that "re-equips, expands, or establishes" the in 48C(b).
	Applicants should select a 30% tax credit if they anticipate meeting the wage and apprentice requirements under 48C(e)(5) and (6). Applicants who do not anticipate meeting those should select 6% from the dropdown. For more on wage and apprenticeship requirements see Section 4 of IRS Notice 2023-18
	Calculated by multiplying Qualified Investment by Expected Credit Rate.

nt should first fill

facility, as defined
nticeship requirements nts, please see

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This worksheet is used to capture information on commercial viability of Critical Materials project proposal. Therefore, no cells, rows, or columns should be added.

*Cash flow statement instructions:* In the appendix materials, applicants should provide an investment budget and ROI over the project lifespan. The model should also include a list of key economic/financial assumptions.

Section	Applicant Information
Organization	Organization type
	Public or private (if small, medium, or large business)
	Investment stage (if private)
	Capital raised to date (\$)
	Annual revenue (\$)
	Net income (\$)
	Debt to capital ratio
	Cash flow available for debt service (\$)
	5-year revenue projection (\$)
	Total full-time employees
	Market cap (if public)
	Moody's investment grade (if available)
	S&P investment grade (if available)
	Fitch investment grade (if available)
Project to completion	Date Complete Permitting
	Date Begin Construction
	Date Begin Operation
	Future equity need to support organization growth over next 5 years (\$)
	Future debt need to support organization growth over next 5 years (\$)
Site selection	Company Name
	City (Facility)
	State (Facility)
	Zip Code (Facility)
Project finance metrics	Projected return on investment
	Weighted average cost of capital
	Projected payback period
	Net present value (with incentives)
	Net present value (without incentives)
	Unlevered Project IRR (%) (with incentives)

	Unlevered Project IRR (%) (without incentives)
	Break-even point (with incentives)
	Break-even point (without incentives)
Project finance sources (please list sources in the table below)	Equity (%)
	Debt (%)
	State or local incentives (\$)
	State or local incentives (non-financial)
	Other federal incentives (\$)
Market overview	Target addressable market (\$ revenue)
	Target addressable market (# of units)
	Project YOY market growth over the next 5 years (5)
	Market share over the next 5 years (%)
Product competitiveness	Unit cost (\$)
	Absolute difference in unit cost of product compared to industry average
	Percent difference in unit cost of product compared to industry average
Corporate health	Ongoing legal claims (Yes or No)
	Planned debt restructuring (Yes or No)
	Going concern (Yes or No)
	Near-term debt maturities (\$)
	Other planned corporate actions that may affect completion of project (Yes or No)

List the top four financing sources for the project and the sum of all other financing sources. Please describe each source.

Financing Source	Type of Financing (e.g., equity, debt, etc.)
Financing Source 1	
Financing Source 2	
Financing Source 3	
Financing Source 4	
Financing Source 5	
Sum of other financing sources	

Indicate the main categories of expenditures associated with the qualified investment. If project contains multiple categories, list them all.

Cost (\$)	Description of expenditure (e.g., Purchasing 2 new units of XX machinery, retooling XX production line)






Describe the timing of expected equity contributions and debt funding as well as the timing of repayment of

<b>Amount (\$)</b>	<b>Timing of financing</b>

Does this investment include any additional categories of expenditures that are not eligible as a qualified investment (e.g., building expa

<b>Is this investment qualified per IRS Notices 2023-18 and 2023-44?</b>





t's project narrative. Data will be extracted from this workbook to compare submissions.

; including operating costs, operating revenues, financing cash flows, EBITDA, tax credits/liabilities, *note inflation estimator used and the start year*

<b>Instructions</b>
Small business, medium business, large business, academic, federal government, state or local government, non-profit. Small and medium enterprises are classified in the North American Industry Classification System (NAICS) as any of sectors 31 through 33; and have a total number of employees within 165% of the size standard limits established by the Small Business Administration (SBA), based on the firm's associated NAICS sector as set forth in 13 CFR Part 121.201.
Provide the revenue of the applicant company for the most recently completed fiscal year
See instructions above on the cash flow statement to be submitted
See instructions above on the cash flow statement to be submitted
See instructions above on the cash flow statement to be submitted
See instructions above on the cash flow statement to be submitted
See instructions above on the cash flow statement to be submitted

See instructions above on the cash flow statement to be submitted
Indicate the percentage of anticipated equity from outside sources
Indicate the percentage of debt anticipated in the capital stack. Enter 0 if not applicable.
Indicate amount of state or local incentives received for the project and briefly describe whether it is a fixed-dollar amount or cost-share.
Also describe non-financial incentives (e.g., land leases, apprenticeship programs, infrastructure support etc.).
Indicate amount of federal incentives received for the project and briefly describe whether it is a fixed-dollar amount or cost-share.
Site third party vetting/ inputs
Site third party vetting/ inputs
Site third party vetting/ inputs
Site third party vetting/ inputs
Site third party vetting/ inputs
Site third party vetting/ inputs
Site third party vetting/ inputs
Indicate if there are any ongoing or expected legal claims related to the project . If selecting Yes, please describe in application narrative
Indicate any planned debt restructuring. If selecting Yes, please explain in the application narrative.
Please briefly describe the company's growth plans for the next five years.
Indicate any planned corporate or management actions that can impact the timely completion of the project or can cause the project to be stalled for an extended period of time. If selecting Yes, explain in brief.

expected debt funding

ension), indicate here as well.

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Applicants are asked to estimate the emissions footprint of the facility itself, inclusive of Scope 1 emissions

### Facility-Level Greenhouse Gas Emissions

EPA GHGRP ID (if applicable)		
Estimated Facility Greenhouse Gas Emissions Scope 1		<i>metric tons CO2e/year</i>
Estimated Facility Greenhouse Gas Emissions Scope 2		<i>metric tons CO2e/year</i>

... next to the corresponding inputs  
... and electricity- and fuel-related Scope 2 emissions.

Applicants with existing facilities subject to EPA GHGRP reporting should provide their GHGRP ID.
<p>Estimate the annual Scope 1 CO<sub>2</sub>-equivalent emissions at the facility after the project is completed and fully operational. Scope 1 emissions should include at least emissions associated with on-site stationary combustion, process emissions, and use of gases such as HFCs. For assistance, applicants may wish to consider the use of the EPA's Simplified GHG Calculator or Greenhouse Gas Equivalencies Calculator.</p> <p>Applicants for Critical Materials projects are not required to submit a full methodology, but should justify their emissions estimates in the narrative. See Section V of Appendix B for more information.</p>
<p>Estimate the annual Scope 2 (electricity- and fuel-related) CO<sub>2</sub>-equivalent emissions at the facility after the project is completed and fully operational. Scope 2 emissions should include at least the upstream emissions associated with the production of any electricity, hydrogen, or steam purchased by the facility. For assistance, applicants may wish to consider the use of the EPA's Simplified GHG Calculator or Greenhouse Gas Equivalencies Calculator.</p> <p>Applicants for Critical Materials Projects are not required to submit a full methodology, but should justify their emissions estimates in the narrative. See Section V of Appendix B for more information.</p>

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Please list the direct jobs that will be created during both construction and operations of the facility. For operating jobs created by the project. Please be as specific as possible.

Direct jobs are those jobs represented by the number of people whose work is directly billed to the project. **Do not list Indirect Jobs**, defined as employees included in the supply chain who are not directly billed to the project.

- Producers of equipment or services that are used on the project
  - Accounting or administrative services
  - End-use installers
  - Operating jobs unrelated to the project (for a GHG reduction project in a steel facility, do not count steel mill jobs)
- The review team will calculate indirect jobs using a consistent methodology.

### Workforce and community engagement questions

#### Question

Does the location or community qualify as a disadvantaged community according to the Climate and Economic Justice Screening and Map Act?

Does the location qualify as a 48C energy community? (Yes/No)

If yes to above, which census tract as identified in Appendix C or IRS Notice 2023-44 is your project location?

Does the project meet the Prevailing Wage and Apprenticeship (PWA) requirements? (Yes/No)

*For more on wage and apprenticeship requirements, please see Section 4 of IRS Notice 2023-18.*

Have you provided a Prevailing Wage and Apprenticeship (PWA) certification? (Yes/No)

How many apprenticeships do you anticipate supporting through this project?

How many scholarships do you anticipate supporting through this project?

What is the anticipated value of scholarships you will provide?

How frequently will you award scholarships?

### Workforce and community agreements

Applicant should fill out this section with all community and workforce agreements and programs under development. List the specific named co-signers or other partners in last column. Please list the specific named co-signers and distinguish between co-signers and anticipated co-signers where appropriate.

Agreement Type	No of agreements under development	No. of agreements signed or active
Good Neighbor Agreement / Community Benefits Agreement		
Collective Bargaining Agreement (Non-Construction)		
Project Labor Agreement or Community Workforce Agreement (Construction)		
Other workforce development agreements or community engagement agreements		

### Workforce and jobs impacts

Applicant should fill out this section for any construction jobs they anticipate will meet wage and apprenticeship requirements. Please refer to the corresponding Treasury guidance.

#### Construction Jobs - Meeting Wage and Apprenticeship Requirements







is next to the corresponding inputs

or retrofits/reequipped facilities, please list the number of current jobs for the purposes of calculating i  
project.  
to the project. Examples include:

steelworkers not working on the GHG reduction)

Input	
Economic Justice Screening Tool (CEJST)? (Yes/No)	
ted in?	

er development, signed, or active. Please list  
s or other partners in last column. Please

**List key co-signatory parties (e.g., X  
community nonprofit, X union local)**


enticeship requirements under 48C(e) and

Applicant should fill out this section only i  
prevailing wage and apprenticeship requi  
expect to receive a 6% credit or pay penal

**Construction Jobs - NOT Meeting Wag**





Incremental

If they anticipate that certain construction jobs will not meet requirements. If so, they are not guaranteed the 30% credit and should

**Age and Apprenticeship Requirements**

Annualized FTE <i>FY2023</i>	Annualized FTE <i>FY2024</i>	Annualized FTE <i>FY2025</i>	Annualized FTE <i>FY2026</i>	Annualized FTE <i>FY2027</i>



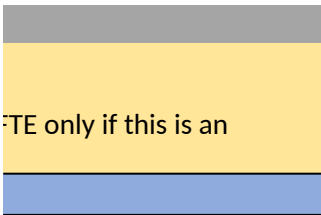


Current and anticipated operating jobs at the facility. Applicant should fill out the first column for Current F existing facility.

**Operating Jobs**

Job Category <i>Applicant can determine category</i>	Current FTE (if applicable) FY2022	Annualized New FTE FY2023	Annualized New FTE FY2024	Annualized New FTE FY2025





FTE only if this is an



Annualized New FTE <i>FY2026</i>	Annualized New FTE <i>FY2027</i>



**Instructions for Critical Material Processing, Refining, and Recycling Proj**

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Applicant should fill out the relevant user input (green) cells in the tables for both producing multiple critical minerals and or is involved in multiple production stages for a material, mineral, and/or production stage that is applicable.

Material Input	
Input Type	Input Description
Select input type (selected primary for virgin materials, and secondary for scraps/end of life materials)	Briefly describe input selected e.g. ore, mine tailing, waste stream, concentrate, scraps(automobile, mixed - shredded, household appliance, new(manufacturing/industrial) scraps etc.) etc.

Critical Materials Outputs (Each applicant MUST fill in in	
Critical Materials Outputs	Processing (tons)

<p>If other material is produced, enter the material and associated amounts after row 79</p>	<p>If the facility performs any processing (i.e., converting ore into high-value concentrate [comminution, dewatering, beneficiation]), fill out this column with the average annual output tonnage of the metal or element content contained in the concentrate produced.</p> <p>For instance, if a project produces a concentrate that contain multiple recoverable critical materials, please calculate each recoverable material content contained in your concetrate and fill out the annual average amount in each respective material below.</p> <p>Provide the tonnage in terms of the raw material present, not its compound or chemical form.</p>
Aluminium	
Antimony	
Arsenic	
Barite	
Beryllium	
Bismuth	
Cerium	
Cesium	
Chromium	
Cobalt	
Dysprosium	
Electrical Steel*	
Erbium	
Europium	
Fluorine*	





**Project Applicants**

Instructions are in yellow boxes next to the corresponding inputs with Material Inputs and Critical Material Outputs. If the project is a recycling process (processing refining, recycling), fill in quantity in each relevant

**Input**

Input capacity (tons)	Sourcing
<p>For each input , provide the corresponding amount entering the facility. If more than 10 inputs, provide the 10 inputs with largest annual tonnage</p>	<p>For each input briefly describe where it is sourced (including associated geographical region), and the status of any agreements to procure the input</p>

**Output table above used to produce these outputs)**

Refining (tons)	Recycling Output (tons)

<p>If the facility performs any refining at all (i.e., converting a concentrate into metal or element [smelting, purifying, reduction]), fill out this column with the average annual output tonnage of each respective metal or element produced.</p> <p>Provide the tonnage in terms of the raw metal present, not its compound or chemical form.</p>	<p>If the facility performs any recycling activities, fill out this column with the average annual output tonnage of the metal or element produced/recovered from the recycling activity.</p> <p>Provide the tonnage in terms of the raw metal produced/recovered, not its compound or chemical form.</p>







**output table below)**

Input Type	Input Description	Input capacity (tons)
Select input type (selected primary for virgin materials, and secondary for scraps/end of life materials)	Briefly describe input selected e.g. ore, mine tailing, waste stream, concentrate, scraps(automobile, mixed - shredded, household appliance, new(manufacturing/industrial) scraps etc.) etc.	For each input , provide the corresponding amount entering the facility. If more than 10 inputs, provide the 10 inputs with largest annual tonnage
Primary	Bauxite	100000
Primary	Alumina	200000
Secondary	Aluminum containing old scraps	200000
Secondary	Aluminum containing new scraps	200000
Secondary	Automobile scraps	100000
Primary	Nickel ore	100000
Secondary	Nickel containing old scraps	50000
Secondary	Battery old scraps	1000
Secondary	Permanent magnets	1
Primary	Rare earth element ore	500

**Example of How to Fill Out Critical Materials Outputs (Examples provided here are independent)**

Critical Materials	Processing (tons)	Refining (tons)
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Example of possible projects	<p>If the facility performs any processing (i.e., converting ore into high-value concentrate [comminution, dewatering, beneficiation]), fill out this column with the average annual output tonnage of the metal or element content contained in the concentrate produced.</p> <p>For instance, if a project produces a concentrate that contain multiple recoverable critical materials, please calculate each recoverable material content contained in your concetrate and fill out the annual average amount in each respective material below.</p> <p>Provide the tonnage in terms of the raw material present, not its compound or chemical form.</p>	<p>If the facility performs any refining at all (i.e., converting a concentrate into metal or element [smelting, purifying, reduction]), fill out this column with the average annual output tonnage of each respective metal or element produced.</p> <p>Provide the tonnage in terms of the raw metal present, not its compound or chemical form.</p>
Nickel - Project A	6,000.00	6,000.00
Nickel - Project B	6,000.00	
Nickel - Project C		6,000.00
Nickel - Project D	6,000.00	6,000.00
Nickel - Project E		
Nickel - Project F	6,000.00	
Neodymium - Project G	5.00	
Dysprosium - Project G	0.20	
Cerium - Project G	0.20	
Cobalt - Project H		

Sourcing
For each input briefly describe where it is sourced (including associated geographical region), and the status of any agreements to procure the input
U.S
U.S
U.S
U.S
U.S
Canada
Canada
U.S
U.S
U.S

Sourced from examples provide in the input table above)	
Recycling Output (tons)	Notes

<p>If the facility performs any recycling activities, fill out this column with the average annual output tonnage of the metal or element produced/recovered from the recycling activity.</p> <p>Provide the tonnage in terms of the raw metal produced/recovered, not its compound or chemical form.</p>	<p>Example of possible scenario of operations</p>
2,500.00	Example of a facility involved all three operations
2,500.00	Example of a facility involved in processing and recycling operation only
2,500.00	Example of a facility involved in refining and recycling operations
	Example of a facility involved in recycling and refining operations
2,500.00	Example of a facility involved in recycling operation only
	Example of a facility involved in processing only
1.00	Example of a facility that produce multiple critical materials
0.10	
0.10	
500.00	Example of a facility involved in recycling only