

Hydrofluorocarbon Reclaim and Innovative Destruction Grants: Informational Webinar

December 7, 2023 | 1 P.M. Eastern

- **Welcome and Introduction**
- **Opening Remarks**
- **Hydrofluorocarbon (HFC) Reclaim and Innovative Destruction Grants**
 - Inflation Reduction Act (IRA)
 - American Innovation and Manufacturing (AIM) Act
 - Notice of Funding Opportunity (NOFO) Overview & Objectives
- **Next Steps and Resources**

Cindy Newberg

Director, Stratospheric Protection Division

Jennifer Macedonia

Associate Deputy Assistant Administrator, Office of Air and Radiation

- **Purpose:** Provide an overview of the Notice of Funding Opportunity for the Hydrofluorocarbon Reclaim and Innovative Destruction Grants under the Inflation Reduction Act (IRA)
- EPA staff cannot provide feedback on any potential application or project during the open competition period
- This webinar will be recorded and posted online
- EPA will maintain and update as needed a Frequently Asked Questions (FAQ) document based on questions received during the open competition period
- Materials will be posted at: <https://www.epa.gov/inflation-reduction-act/hfc-reclaim-and-innovative-destruction-grants>

Unless called to speak, please keep Mic on **MUTE**

- If joining by phone unmute by entering *6

During Q&A session

- Raise your **HAND** to ask to speak
- Open **CHAT** to submit question or ask to speak
- Please state your **NAME** and **AFFILIATION**
- Please be mindful of time to allow others opportunity to ask a questions

If your internet connection is unstable

- Turning off your **VIDEO** might help

- Inflation Reduction Act makes historic investments in climate action that are expected to reduce U.S. emissions ~40% by 2030 while supporting disadvantaged communities and the clean energy industrial base.
- Investments will drive significant emissions reductions over the next decade while also laying the groundwork for long-term decarbonization of hard-to-abate sectors.
- **Sec. 60109** provides \$15 million for competitive grants for reclaim and innovative destruction technologies
 - *“\$15,000,000, to remain available until September 30, 2026, for competitive grants for reclaim and innovative destruction technologies under subsections (a) through (i) and subsection (k) of section 103 of division S of Public Law 116-260 (42 U.S.C. 7675)”* (the American Innovation and Manufacturing (AIM) Act)

American Innovation and Manufacturing Act (AIM Act)



THE AIM ACT
AUTHORIZES
EPA TO
ADDRESS
HYDRO-
FLUROCARBONS
(HFCs)



PHASE DOWN

Phase down HFC production and consumption through an **allowance allocation and trading program**



TRANSITION

Facilitate **sector-based technology transitions** through restrictions on HFCs



MAINTAIN

Issue regulations to **maximize reclaim and minimize releases** of HFCs

HFC Reclaim and Innovative Destruction Grants Overview



- On November 17, the EPA launched an approximately \$15 million competition for eligible entities to develop projects for HFC reclamation and innovative destruction technologies
- Includes a \$1.5 million set-aside for federally recognized tribes
- Applications are due **February 16, 2024, at 11:59 p.m. ET** via [Grants.gov](https://www.grants.gov)

- Reclamation involves reprocessing and upgrading recovered substances through such mechanisms as filtering, drying, distillation, and chemical treatment to restore the substance to industry specifications
- Benefits of HFC reclamation
 - Supports a smooth transition to alternatives by bolstering the current supply of HFCs
 - Can minimize disruption of the current capital stock of equipment by allowing its continued use with existing supplies
- Are there regulatory requirements related to HFC reclamation?
 - Existing requirements under CAA Title VI (e.g., Sections 608 and 609) apply to HFCs and substitutes (e.g., Hydrofluoroolefins), such as servicing practices, recovery and recycling equipment, and venting prohibition
 - Under the AIM Act, subsection (h) directs EPA to establish regulations to control, where appropriate, practices, processes, or activities regarding the servicing, repair, disposal, or installation of equipment for purposes of:
 - Maximizing the reclamation and minimizing the release of HFCs from equipment
 - Ensuring the safety of technicians and consumers

HFC Destruction



- Destruction of regulated substances occurs when reuse is not practicable
- Benefits of HFC destruction
 - Destruction ensures unwanted or unusable HFCs are not emitted to the atmosphere where they contribute to climate change
- Are there regulatory requirements related to HFC destruction?
 - Technologies listed in the Table are approved for destruction of regulated substances

| All regulated substances except HFC-23 40 CFR §84.29(a) | HFC-23 40 CFR §84.29(b) |
|--|--|
| Cement kiln | Gaseous/fume oxidation |
| Gaseous/fume oxidation | Liquid injection incineration |
| Liquid injection incineration | Reactor cracking |
| Porous thermal reactor | Rotary kiln incineration |
| Reactor cracking | Argon plasma arc |
| Rotary kiln incineration | Nitrogen plasma arc |
| Argon plasma arc | Chemical reaction with hydrogen and carbon dioxide |
| Nitrogen plasma arc | Superheated steam reactor |
| Portable plasma arc | |
| Chemical reaction with hydrogen and carbon dioxide | |
| Gas phase catalytic de-halogenation | |
| Superheated steam reactor | |

HFC Reclaim and Innovative Destruction Grants Objectives



- To support and contribute to addressing HFCs through:
 1. Reclaim Technologies
 2. Reclaim Market Dynamics
 3. Innovative Destruction Technologies
- Actively engage with and mitigate any potential negative human health or environmental risks and hazards to disadvantaged communities in the project design and implementation

- The EPA anticipates approximately four to nine awards
- Approximate funding ranges for specific project areas:
 - Project Area 1 (Reclaim Technologies): approximately \$3 million to \$5 million
 - Project Area 2 (Reclaim Market Dynamics): approximately \$450,000 to \$1.5 million
 - Project Area 3 (Innovative Destruction Technologies): approximately \$3 million to \$5 million
- There is a funding cap of \$6.5 million for a single award
- \$1.5 million set aside for federally recognized Tribes

Eligible Applicants



- States, and the District of Columbia
- Local Governments
- U.S Territories and Possessions
- Indian Tribes
- Public universities and colleges
- Hospitals
- Laboratories
- Other public or private nonprofit institutions

For-profit organizations and individuals are not eligible entities for this funding opportunity

Coalitions

- Groups of two or more eligible applicants may choose to form a coalition and submit a single application, one entity must be responsible for the grant
- For-profit organizations are not eligible for subawards under this grant program but may receive procurement contracts

Applicants should indicate which project area their application falls under:

(1) Reclaim Technologies – pilot projects for new/better technologies to increase the reclamation of HFCs by expanding access to reclamation and improving the reclamation process

(2) Reclaim Market Dynamics – programs or pilot projects for innovative strategies that address market dynamics to increase HFC reclamation by lowering barriers

(3) Innovative Destruction Technologies – pilot projects for innovative technologies or innovative deployment of technologies to destroy unusable and/or unwanted HFCs

Evaluation Criteria Summary



| Evaluation Criteria Summary | Points |
|--|------------|
| 1. Project Summary and Approach | 25 |
| 2. Environmental Results- Outputs, Outcomes and Performance Measures | 15 |
| 3. Disadvantaged Communities | 10 |
| 4. Programmatic Capability and Past Performance | 10 |
| 5. Project Sustainability and Replicability | 10 |
| 6. Job Quality | 5 |
| 7. Innovative Approaches and Solutions | 10 |
| 8. Budget | 15 |
| Total | 100 |

- Applications must substantially comply with the application submission instructions and requirements set forth in Section IV of the NOFO
- Grants must be submitted by the deadline via Grants.gov
- Applications must support Goal 4, “Ensure Clean and Healthy Air for All Communities” and Objective 4.1, “Improve Air Quality and Reduce Localized Pollution and Health Impacts,” of the EPA’s Strategic Plan
- Each application may only address one of the three project areas (shown on Slide 15).
- Applications that propose projects under Innovative destruction technologies must demonstrate that their proposed technologies will use one of the approved technologies listed at 40 CFR 84.29. Applications must include the name of the destruction technology as listed in 40 CFR 84.29 and the HFCs they intend to destroy
- Applications which request the EPA assistance funds less than \$450,000 or in excess of \$6.5 million as specified in Section II.B of this NOFO, are not eligible and will not be reviewed

Evaluation Criteria: Section 1



| Project Summary and Approach | Points |
|--|-----------|
| A. Overall Project -- The overall proposed project, consistent with Section I.B. | 15 |
| B. Anticipated Project Benefits – How the proposed project will support or benefit the public or advance scientific knowledge and the relationship of the proposed project to the seriousness, extent, and urgency of the environmental problems toward which the project is directed. How the application demonstrates the anticipated public benefits to be derived from the project and describe the degree to which the project can be expected to produce results that will have general application to national pollution control problems. | 10 |
| Total | 25 |

| Environmental Results – Outputs, Outcomes and Performance Measures | Points |
|---|-----------|
| A. Expected Project Outputs and Outcomes – The extent and quality to which the applicant identifies and proposes outputs and outcomes, as described in Section I.C. | 5 |
| B. Performance Measures and Plan – The quality of the proposed performance measures and effectiveness of the applicant’s plan for tracking and measuring its progress toward achieving the expected project outputs and outcomes, including those identified in Section I.C. of this announcement. | 5 |
| C. Timeline and Milestones – The reasonableness of the proposed timeline including key milestones for specific tasks and the likelihood of completion of the project’s goals and objectives by project end. | 5 |
| Total | 15 |

| Disadvantaged Communities | Points |
|---|-----------|
| <p>A. Disadvantaged Communities</p> <ul style="list-style-type: none">• Provides a comprehensive discussion and assessment of avoided risks and hazards to disadvantaged communities from the proposed HFC reclaim or destruction projects;• Explains how input from disadvantaged communities was incorporated into the application; and• Includes meaningful involvement of disadvantaged communities during the period of performance of the project. | 10 |
| Total | 10 |

Evaluation Criteria: Section 4



| Programmatic Capability and Past Performance | Points |
|--|-----------|
| A. Past Performance – Past performance in successfully completing and managing the assistance agreements identified in the project narrative as described in Section IV.C. of the announcement. | 4 |
| B. Reporting Requirements – History of meeting the reporting requirements under the assistance agreements identified in the project narrative as described in Section IV.C. of the announcement, including whether the applicant submitted acceptable final technical reports under those agreements and the extent to which the applicant adequately and timely reported on their progress towards achieving the expected outputs and outcomes under those agreements and if such progress was not being made whether the applicant adequately reported why not. | 3 |
| C. Staff Expertise – Organizational experience, including staff expertise and qualifications, staff knowledge, and resources or the ability to obtain them, to successfully achieve the goals of the proposed project. | 3 |
| Total | 10 |

Evaluation Criteria: Section 5



| Project Sustainability and Replicability | Points |
|---|-----------|
| Under this criterion, the EPA will evaluate applicants based on the extent to which the project outputs and outcomes are sustainable and can be continued after project completion. The Agency will also evaluate the application based on the extent and quality to which the application identifies and explains how results from the project can be replicated, including with other technologies or in other communities. | 10 |
| Total | 10 |

Evaluation Criteria: Section 6



| Job Quality | Points |
|--|----------|
| The application will be evaluated on the quality of the response and extent to which it describes, as applicable, concrete strategies and commitments to ensure job quality, strong labor standards, and a diverse, highly skilled workforce for the implementation of the greenhouse gas reduction measures | 5 |
| Total | 5 |

| Innovative Approaches and Solutions | Points |
|---|-----------|
| <p>Under this criterion, the Agency will evaluate the application based on the extent to which the application proposes a project that includes innovative approaches (e.g., not usual, routine, or established practices) to support the development of technologies and practices to support HFC reclamation or destruction. Examples of innovative approaches and solutions include, but are not limited to, new or novel services, purchases, development, or installation of emerging technologies, creating and encouraging the development of emerging markets, solving local challenges around access to safe HFC reclamation or destruction, and others.</p> | 10 |
| Total | 10 |

Evaluation Criteria: Section 8



| Budget | Points |
|---|-----------|
| A. Budget Detail – The proposed budget provides a detailed breakout by funding type in the proper budget category for each activity for which the applicant is requesting funding. | 5 |
| B. Expenditure of Awarded Funds – The applicant’s approach, procedures, and controls to ensure that awarded grant funds will be expended in a timely and efficient manner. | 5 |
| C. Reasonableness of Costs – The proposed costs are reasonable to accomplish the proposed goals, objectives, and measurable environmental outcomes. | 5 |
| Total | 15 |

Key Dates



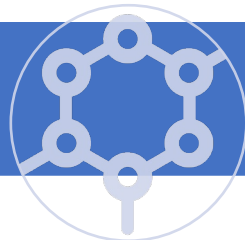
Notice of Intent to Apply

- Notices of Intent (NOI) to Apply assist EPA in managing the grant review process.
- NOIs are optional and non-binding.
- Submit via email to HFCGrants@epa.gov by **December 15, 2023**, and include:
 - Information about the applicant including name of the organization and contact details
 - Identification of the type of project that will be submitted in the application
 - The amount of funds that will be requested
 - A brief description of no more than five sentences of the project

- Applications must be submitted through Grants.gov by **February 16, 2024, at 11:59 P.M. EST**
- The application must include:
 - Mandatory Federal Forms (see NOFO)
 - Project Narrative
 - Cover page
 - Workplan (up to 15 pages)
 - Budget Table (included in 15-page limit)
 - Science Data Management Plan (SDMP)
 - Coalition Coverage (if applicable)
 - Partnership Letters (if applicable)

- Application packages must be submitted to EPA via Grants.gov no later than 11:59 P.M. ET on February 16, 2024

HFC NOFO



- EPA's [HFC Grants Website](#)
- Helpline: HFCGrants@EPA.gov
- Copies of this presentation will be available at:
<https://www.epa.gov/inflation-reduction-act/hfc-reclaim-and-innovative-destruction-grants>

Resources



Questions and Answers

Submit questions to: HFCGrants@epa.gov

For more information, including the NOFO, and Question and Answers document:
<https://www.epa.gov/inflation-reduction-act/hfc-reclaim-and-innovative-destruction-grants>