

Public Workshop

SB 1013 F-gas Reduction Incentive Program (FRIP)

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California Air Resources Board
Research Division
F-gas Reduction Strategy Section
FRIP@arb.ca.gov



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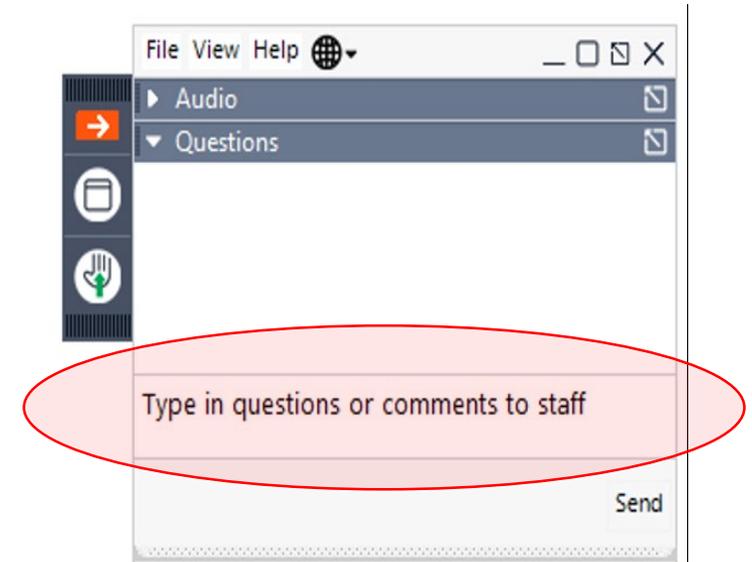
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Submit your questions and comments via GoToWebinar

- Use question box



Today's Agenda



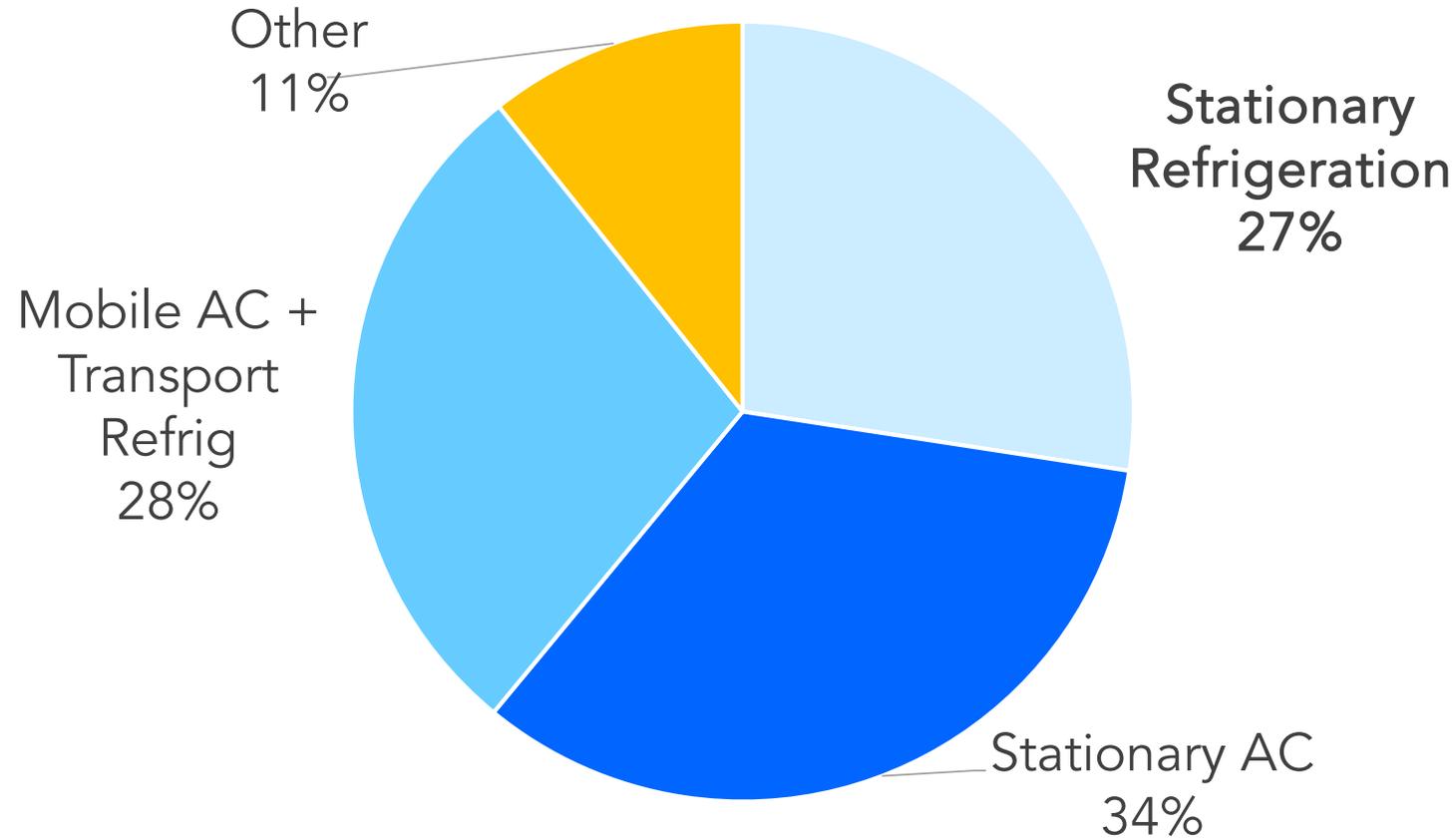
- Session 1
 - Proposed FRIP Program Materials and Application Process
- Session 2
 - Using the FRIP Tool to Calculate GHG Emission Reductions
- Session 3
 - CEQA process
- Session 4
 - FRIP Evaluation and Award Process
 - Grantee Requirements
 - Funds Disbursement
 - Clarifying Questions

Introduction

- SB 1013 established an incentive program to “promote the adoption of new refrigerant technologies.”
- \$1 million allocated in the FY 2019-20 budget from the Greenhouse Gas Reduction Fund (GGRF) (AB 74, Budget Act of 2019).
- GGRF appropriations fall under the umbrella of California Climate Investments (CCI).
- FRIP developed with SB 1013 requirements, GGRF and CCI requirements and stakeholder input.



HFC Emission Sources in CA, 2018



Source: CARB F-gas Inventory, 2018

PROPOSED F-gas Reduction Incentive Program Materials

FRIP Process and Proposed Timeline



Webinar/FAQ
to answer
questions – LATE
AUGUST



FRIP Funding Deadlines



	Legislatively mandated deadline
Funds allocation	Fiscal Year 2019-2020 budget
Encumbrance deadline	June 30, 2021
Liquidation deadline	June 30, 2025

Encumbrance = Funds allocated to Grantees and grant agreements between CARB and Grantees executed

Liquidation = Project deliverable completed and funding award invoices submitted to CARB for reimbursement

Proposed FRIP Program Materials



Program Guidelines and Solicitation Manual (or "Guidelines")

Templates for forms submitted in the application package	Attachment B: Application Form Attachment C: Project Summary templates for Tiers I and II Attachment E: Engineering Assessment Template (Tier I only) Attachment F: Payee Data Form Attachment G: CEQA Worksheet
GHG Emissions Quantification Materials	Attachment D: User Guide for the FRIP Quantification Methodology and FRIP GHG Tool
Supporting documents	Attachment A: Submittal checklists for Tier I and II Attachment G: CEQA Notice of Exemption Example Attachment H: Sample Draft Grant Agreement executed by CARB and the Grantee upon receiving an award

Available at: <https://ww2.arb.ca.gov/our-work/programs/FRIP/program-materials>

- Funding limited to existing and new retail food facilities in California that:
 - Have or plan to install a refrigeration systems containing > 50 pounds of alternative lower-GWP refrigerant.
 - For new facilities, plan to submit a building permit application prior to January 1, 2022.

Proposed Funding Amounts for Tier I



Technology and refrigerant GWP limits	Total funds available (\$)	Maximum funding available for projects (\$)
Installation of or full/partial conversion to ultra-low-GWP refrigerant (< 10 GWP)	600,000	150,000 for existing facilities or 50,000 for new facilities or 100% project cost premium (whichever is lower) OR 200,000 for existing facilities or 75,000 for new facilities or 100% project cost premium (whichever is lower) for projects located in LADWP territory

Proposed Funding Amounts for Tier II



Technology and refrigerant GWP limits	Total funds available (\$)	Maximum funding available for projects (\$)
<p>i. Retrofit only: Refrigerant retrofit from high-GWP (> 3900) to lower-GWP refrigerant (< 1500 GWP)</p> <p>ii. Retrofit + charge reduction: Refrigerant retrofit from high-GWP (> 3900) to lower-GWP refrigerant (< 1500 GWP) with at least 25% charge reduction</p>	<p>400,000</p>	<p>i. 25% of retrofit costs*. 50% of costs* for projects located in low-income/disadvantaged communities or independent stores.</p> <p>ii. 25% of retrofit costs* and \$25/pound of refrigerant permanently removed up to 1000 pounds.</p> <p>* Retrofits valued at \$45/pound</p>

- Los Angeles Department of Water and Power (LADWP) has allocated \$200,000 for Tier I projects allocated in LADWP territory.
- LADWP will provide match funding up to \$25/MTCO₂e of refrigerant emission reductions.
- Projects selected for FRIP funding located in LADWP territory will be eligible for higher maximum funding amounts.
- Remaining funds may be allocated to Tier II projects located in low-income and disadvantaged communities.

- The Emerging Technology Program (ETP), led by Southern California Edison (SCE) will provide comprehensive Measurement & Verification (M&V) support for select Tier I projects.
- Projects located in IOU territories and scalable technologies are eligible for M&V support. Projects outside IOU service territory will be considered on a case-by-case basis.
- SCE will participate in the FRIP application evaluation process and identify eligible Tier I projects.
- Applicants do not need to submit a separate application to receive M&V support. If selected for an award, FRIP applicants must sign an agreement to coordinate with SCE and share data publicly.
- Some Tier II projects will be considered for M&V support.

Proposed Scoring Criteria



- Stage One: Administrative Screening Criteria
 - Same criteria for both Tier I and Tier II projects
- Stage Two: Technical Scoring Criteria
 - Different criteria for Tier I and Tier II
 - Mandatory and Optional criteria for Tier I and Tier II
- Competitive solicitation
 - Tier II ties will be resolved in favor of applications received first

Stage One: Administrative Criteria



Applications must meet ALL criteria to progress to Stage two

The application is received by **due date and time** specified in the Guidelines.

The applicant is an **eligible applicant** and the technology is an **eligible technology**.

The **application form is signed** and dated.

ALL required documents for Tier I and Tier II are included as specified in the application checklist and in the Guidelines.

The application contains a **letter confirming allocation of funds for the total project cost** other than funds requested from FRIP.

The **requested funding amount falls within the maximum range** specified in these Guidelines.

If the applicant has submitted more than one application for either tier, **each application is for a distinct project**.

The application includes a Resolution approving projects, if applicable.

Proposed Mandatory Technical Criteria (Tier I)



Stage Two: Mandatory Technical Scoring Criteria for Tier I	Maximum Points
Cost effectiveness of Refrigerant GHG reductions based on total cost and cost premium of the refrigeration system (\$/MTCO ₂ e) (using FRIP tool)	30
Innovation and market potential of proposed technology	20
Plan for information sharing	15
Plan to increase workforce development	15
Project readiness	10
Data collection plan (Measurement and verification (M&V))	10
Maximum possible points for mandatory criteria	100

Proposed Optional Technical Criteria (Tier I)



Optional Criteria	Maximum Points
<p>Energy efficiency</p> <ul style="list-style-type: none">Proposed system has energy use GHG emission reductions compared to baseline system (using FRIP tool).	5
<p>Benefits to priority populations</p> <ul style="list-style-type: none">Located in census tracts identified as low-income or disadvantaged communities.	10
<p>Independent owner/operator</p> <ul style="list-style-type: none">Applicant owns or operates fewer than four facilities.	10
<p>Existing facility</p> <ul style="list-style-type: none">Describes how the project will be implemented in an existing facility with regards to the facility operation.	5

Proposed Mandatory Technical Criteria (Tier II)



Stage Two: Technical Scoring Criteria for Tier II	Maximum points (50)
Project readiness	10
Measures to reduce leaks and improve energy efficiency	20
Refrigerant GHG emission reductions and cost effectiveness (\$/MTCO ₂ e) (using FRIP tool) (only for charge reduction projects)	20
Optional Criteria	
Benefits to priority populations <ul style="list-style-type: none">• Located in census tracts identified as low-income or disadvantaged communities.	10
Independent owner/operator <ul style="list-style-type: none">• Applicant owns or operates fewer than four facilities.	10

- All projects must employ certified technicians (U.S. EPA Section 608 and California C-38 contractor license).
- For Tier I and Tier II projects in existing stores, all refrigerant must be handled in accordance with existing refrigerant laws and industry best practices.

Proposed Limits per Retailer



- Retailers may submit applications for both funding Tiers (must be submitted as separate applications).
- Retailers may submit multiple applications within the same Tier (must be submitted as separate applications).
- Retailers may not apply for both Tier I and Tier II funding for the same store.
- Awards will be restricted to one award per retailer per funding Tier (may change based on number of applications received).

Application Submission Instructions

Tier I Application Package



1	Application form using template (requires applicant signature) (Attachment B)
2	Project summary using template (word document) (Attachment C)
3	GHG emissions and co-benefits quantification using FRIP tool (excel spreadsheet) (Attachment D)
4	Commitment letter confirming allocation of funds (on company letterhead)
5	Estimated or final quote for cost, energy use and refrigerant charge for the ultra-low-GWP proposed system and conventional R-448A/R-449A HFC system using template (word document) (Attachment E)
6	Payee data form 204 (Attachment F)
7	CEQA worksheet and additional CEQA documentation, if applicable (Attachment G)

Available at: <https://ww2.arb.ca.gov/our-work/programs/FRIP/program-materials>

Tier I: Project Summary (Attachment C)



- Project description
- **Scope of work** including a timeline with **major milestones**
- **Project budget** including requested funding amount
- Refrigerant GHG reductions and cost-effectiveness (\$/MTCO₂e) (outputs from the FRIP tool)
- Innovation and market potential of proposed technology
- Plan for information sharing
- Plan for workforce development
- Plan for data collection (M&V) including budget up to \$5000 (**may remove from application based on stakeholder feedback**)
- Information for optional criteria

Tier I: Engineering Assessment (Attachment E)



	Baseline Conventional HFC system	Proposed Ultra-low-GWP system
Refrigerant type	New: R-448A or R-449A for new stores Full or partial conversion: RMP Refrigerant	Proposed refrigerant(s) < 10 GWP
Charge	New: Estimated charge size Full conversion: Charge reported to RMP Partial conversion: Partial charge being converted	Estimated charge size for an equivalent load
Energy usage (OPTIONAL)	New: Highly encouraged to include	New: Highly encouraged to include
Cost	New: TBD Full or partial conversion: \$0	TBD
FRIP (and LADWP) funding requested	TBD	

Tier II Application Package



1	Application form using template (requires applicant signature) (Attachment B)
2	Project summary using template (word document) (Attachment C)
3	GHG emissions and co-benefits quantification using FRIP tool (excel spreadsheet) (Attachment D)
4	Commitment letter confirming allocation of funds (on company letterhead)
5	Payee data form 204 (Attachment F)
6	CEQA worksheet and additional CEQA documentation, if applicable (Attachment G)

Available at: <https://ww2.arb.ca.gov/our-work/programs/FRIP/program-materials>

Tier II: Project Summary (Attachment C)



- Project description
- Scope of work and timeline with major milestones
- Project based including the funding amount requested
- Refrigerant GHG emission reductions and cost-effectiveness \$/MTCO₂e (outputs FRIP tool)
- Description of measures to reduce leaks and improve energy efficiency when conducting a refrigerant retrofit
- Information for optional criteria

Application Submission



- Submit via email by end of solicitation period (tentative date October 7, 5pm) to FRIP@arb.ca.gov.
- Must use templates provided on the FRIP website and adhere to page limits in Guidelines.

Questions on the FRIP Guidelines and Application Process

Calculating GHG Emissions from FRIP Projects

All applicants must quantify estimated GHG emission reductions from their proposed project using the "FRIP tool"

- California Climate Investments (CCI) has developed a GHG emissions and co-benefits excel-based calculator tool for FRIP projects (**Draft**)
- CCI has developed an accompanying user guide that contains the GHG quantification methodology, instructions on using tool and examples based on different project types (**Draft**)
- Attachment D



Available at: <https://ww2.arb.ca.gov/our-work/programs/FRIP/program-materials> & <https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials>

Using the FRIP Tool

Enter project details into "Project Info" tab



Determine the refrigeration system inputs for the baseline and proposed project and enter them into the "Input" tab



GHG Emissions, cost-effectiveness and co-benefits automatically calculated in "Benefits Summary" tab

Location, contact info, funding requested, total budget etc.

System type, refrigerant type, system charge, energy use (optional)

Include info in project summary (Attachment C)

Questions on using the FRIP Tool and Quantifying Emissions

California Environmental Quality Act (CEQA) Process and Requirements for FRIP Projects

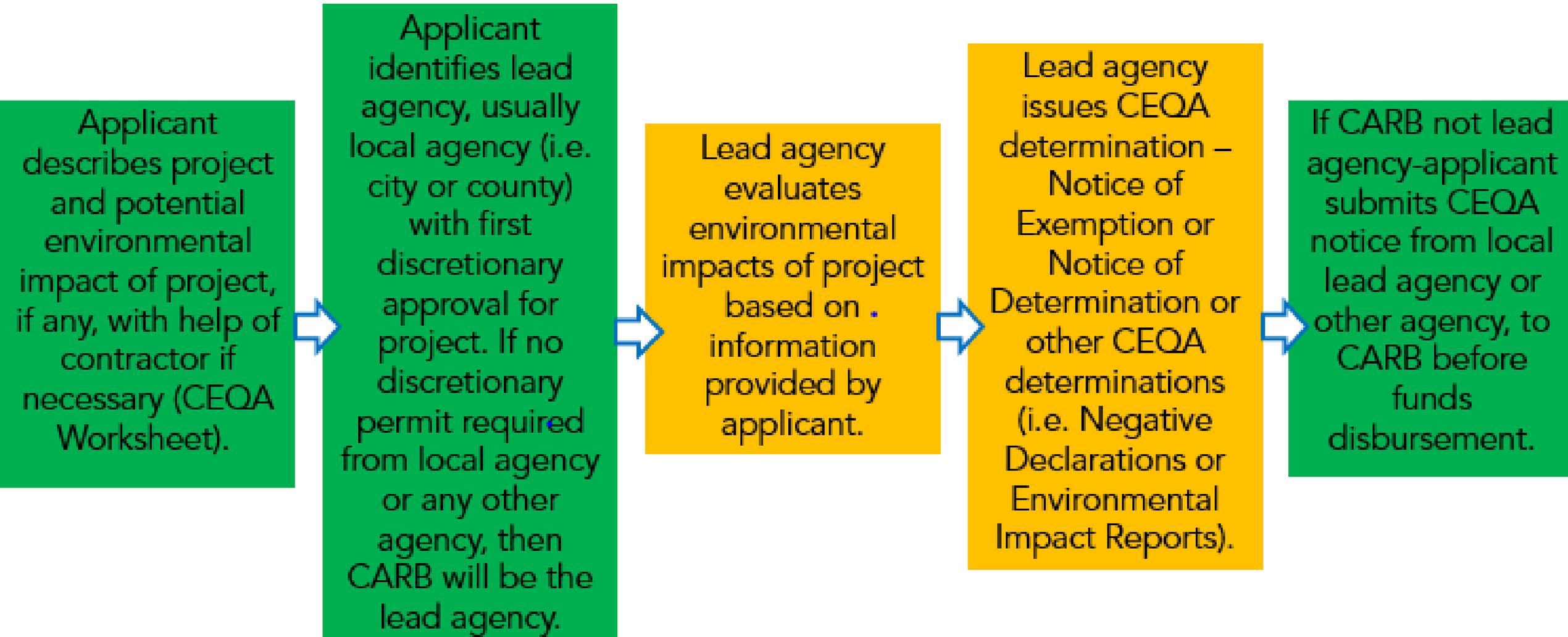
- Under CEQA, a “lead agency” shall determine whether a project may have significant effects on the environment, based on substantial evidence.”
 - A “project” is broadly defined as “any discretionary action that has the potential for resulting in either a direct physical change in the environment or reasonably foreseeable indirect change.”
 - The “Lead agency” is the public agency with the principal responsibility for carrying out or approving a project that may have a significant effect on the environment.
 - “Significant effects on the environment” means substantial, or potentially substantial, adverse change in the environment.

Application Requirements for CEQA



- All FRIP applicants must fulfill CEQA Requirements.
- Must submit CEQA worksheet (Attachment G), which will serve as basis for determining the CEQA lead agency and CEQA compliance.
- CEQA determination may be fulfilled after grant execution but no funds will be disbursed until CEQA is complete.
- CARB may cancel the agreement if applicant's project does not comply with CEQA.

CEQA Lead Agency and Compliance



Questions on the CEQA Process and Requirements for FRIP Projects.

FRIP Evaluation and Award Process

FRIP Evaluation and Award Process

Evaluation Committee of
experts



Evaluation based upon
scoring criteria



CARB publish Notice of
Proposed Award with
applicant info



Grant Agreements
executed between
CARB and Grantees

Grantee Implementation and Reporting Requirements

- Project kick-off meeting to establish deliverables and roles and responsibilities.
- Submit periodic (i.e. quarterly) progress reports (template provided by CARB) to ensure compliance with scope of work and major milestones.
- Verify refrigerant and energy (if applicable) GHG emissions using the FRIP tool.
- Develop draft and final report (template provided by CARB).
- Requirements included in final Grant Agreement.

- For retrofit only projects, develop brief draft and final report (template provided by CARB) confirming project completion
- For retrofit + charge reduction projects, develop a draft and final report with charge reduction measures and confirming project completion
- For both project types, verify refrigerant and energy (if applicable) GHG emissions using the FRIP tool

Grant Term or Grant Agreement End Date



Projects and all required deliverables must be completed before the end of the grant term. Project scope of work and timeline must be aligned with these deadlines.

	Grant Term
Tier I	Proposed system must be installed and operational with at least 1 year of performance data collected before June 30, 2024 (i.e. 1 year prior to the liquidation deadline of June 30, 2025)
Tier II	Completed prior to June 30, 2024 at the latest

Disbursement of Funds

Disbursement of funds

- Funds disbursed on reimbursement basis (Some applicants may qualify for advance payments).
- Disbursement for expenses incurred after the execution of the grant agreement.
- Submit one invoice (75% of money).
- CARB may retain 25% of the funds until the project is completed (final report done).

	Eligible Costs	Milestone
Tier I	Ultra-low-GWP equipment and installation costs	When proposed refrigeration system is installed and operational
Tier II	Refrigerant recovery and retrofit cost including cost of labor and the cost of components for charge reduction measures	When refrigerant retrofit and charge reduction is complete

Q. Can I apply for FRIP funding even if I have started building my grocery store?

A: As long as the refrigeration system has not been installed or operational prior to the execution of the grant agreement.

Q. What is the earliest date I can request funding if I receive FRIP funding?

A: Once grant agreement has been executed and CEQA requirements fulfilled, funding can be requested for eligible costs at pre-determined milestones.

Q. Can I receive the entire funding at one time?

A: CARB may retain a portion of the funding until the end of the project. Besides that amount, allocated funding may be reimbursed in one invoice.

Q. What is the end date of the project?

A: When the Grantee has implemented the project, fulfilled all the requirements in the agreement, collected data (if applicable) and submitted invoices for all allocated funding i.e. Grant Agreement end date.

- Remove M&V from Tier I projects
- Flexibility for online training instead of hands-on training
- Scoring Criteria for Tier I: 10 points for existing stores instead of 5 points

Feedback on Guidelines and Program Materials until July 31

Questions until August 6 (before solicitation begins)

Depending on questions received once solicitation begins, webinar/FAQs
late August

FRIP Feedback FRIP@arb.ca.gov

GHG Tool and User Guide GGRFProgram@arb.ca.gov

<https://ww2.arb.ca.gov/our-work/programs/FRIP>