SB 1013 Incentive Program

F-Gas Reduction Incentive Program (FRIP)

January 30, 2020
FRIP Workshop Agenda

- GGRF Requirements and Guidelines
- Process and Timeline of Funding Program
- Eligible Technologies and Funding Amounts
- Agency and Utility Announcements
- Stakeholder Feedback
Background

- SB 1013 established an incentive program to “promote the adoption of new refrigerant technologies to achieve short- and long-term climate benefits, energy efficiency, and other cobenefits…”
- $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

Image source: Depositphotos.com
What is California Climate Investments?

A statewide initiative that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment—particularly in disadvantaged communities.
## California Climate Investments

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<th>Requirements</th>
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<td>GHG emission reductions</td>
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### CCI Program Steps and Resources

<table>
<thead>
<tr>
<th>Step</th>
<th>Purpose</th>
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<tr>
<td>Expenditure Record</td>
<td>Legal document that describes how the program will meet the statutory requirements of California Climate Investments.</td>
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<tr>
<td>Program Guidelines</td>
<td>Provide applicants information on the program structure and requirements, who and what technologies are eligible, funding amount available, project selection criteria, application procedures and key deadlines.</td>
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<tr>
<td>Quantification Methodology</td>
<td>Excel-based tool provided by CARB for applicants to quantify GHG emission reductions from project.</td>
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<tr>
<td>Solicitation/Application Materials</td>
<td>Materials that need to be submitted by potential applicants</td>
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## FRIP Program Timeline

<table>
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<th>Event</th>
<th>Timeline</th>
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<tr>
<td>1st Public workshop</td>
<td>January 30, 2020</td>
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<tr>
<td>Expenditure Record</td>
<td>January 2020 (complete)</td>
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<tr>
<td>Stakeholder input on Program Structure</td>
<td>January-March 15, 2020</td>
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<tr>
<td>Draft program guidelines release</td>
<td>April 2020</td>
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<tr>
<td>2nd Public Workshop/Webinar</td>
<td>May 2020</td>
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<tr>
<td>Program Solicitation Open</td>
<td>Summer 2020 (8 weeks)</td>
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<tr>
<td>Awards Announcement</td>
<td>Fall  2020</td>
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<tr>
<td>Funds disbursement</td>
<td>Reimbursement system</td>
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<tr>
<td>Encumbrance Deadline</td>
<td>June 30, 2021</td>
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<tr>
<td>Liquidation Deadline</td>
<td>June 30, 2025</td>
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Proposed Application Process

- Open solicitation period 8 weeks in summer 2020
- Technical assistance before and during application process
- Applicants expected to submit the following materials:
  - Project Narrative
  - GHG Emission Reductions and other co-benefits using Quantification Methodology
  - Plan for training contractors in low-GWP technologies
  - Other materials
FRIP Website

Proposed Funding Eligibility

- “Eligible applicants shall be users of systems of refrigerant technologies (SB 1013)”
- Open funding only to the retail food sector (i.e. owners and operators of refrigeration systems)
- Discussion of Funding eligibility
  - Retail food sector only
  - Systems > 50 lbs. only
Proposed FRIP Program Guidelines

Preliminary Ideas for Eligible Technologies and Funding Amounts
Proposed Eligible Technologies and Funding Amounts

Tier I – Innovative Technologies ($500,000)

- Partial or full installations of systems using ultra-low GWP refrigerants (GWP <10) in new and existing stores

Tier II – Conventional Technologies ($500,000)

- Refrigerant Retrofits from R-404A/R-507A to R-448A/R-449A
- Refrigerant retrofits from R-404A/R-507A to R-448A/R-449A accompanied by permanent charge reduction of 25% (or greater) through system architectural changes
Proposed Tier I Funding ($500,000)

- Funding amount available - Maximum amount of $150,000 per applicant or 100% of the cost premium, whichever is lower

- Examples of eligible technologies for partial or full retrofits/new installations
  - CO₂ condensing units
  - HFC-free HVAC integrated refrigeration systems
  - CO₂ transcritical with ejectors or other enhancements
  - NH₃ or propane or HFO/CO₂ cascade systems
  - R-290 microdistributed systems
Proposed Scoring Criteria for Tier I Funding

- Competitive solicitation
- Technical Merit for technology type
- GHG reductions possible through refrigerant reductions and energy efficiency
- Requirements for funding recipients
  - Training in low-GWP technologies open to contractors in the area
  - Prepare case study after 6 months of operation
- Extra Points
  - Match funding from utility
  - Existing store
  - Facility located in disadvantaged community or independently owned
Tier I Funding Discussion

- Match funding requirement
- Prescriptive about eligible technologies
- Connecting OEMs with eligible technologies to retailers
- GHG Emission Reduction Baseline
  - Refrigerant baseline: R-448A/R-449A
  - Energy efficiency baseline: R-448A/R-449A with/without adiabatic condenser
- One incentive/company and potentially two incentives/company for CO₂ condensing units
Proposed Tier II ($500,000)

- Refrigerant retrofit cost estimated at $45/lb.
- Incentives offered for:
  - 25% of refrigerant retrofit cost (≈$11/lb.)
  - 50% of refrigerant retrofit cost if also accompanied by a permanent charge reduction of 25% or greater? (≈$22/lb.)
Proposed Scoring Criteria for Tier II Funding

- Rolling basis with some scoring criteria
- GHG reductions with refrigerant retrofit and charge reduction relative to baseline (R-404A/R-507A → R-448A/R-449)

Requirements:
- Guidance documents for retrofits included in the grant agreement
- Reclaimed refrigerant must be properly managed

Extra points:
- Match funding from utility
- Located in disadvantaged community or independently owned
Tier II Funding Discussion

- 25% of retrofit costs
- Is a 25% or higher permanent charge reduction reasonable?
- What about 50% of the refrigerant retrofit cost for a 25% charge reduction and refrigerant retrofit?
- Leak management after retrofits
- Prescriptive guidance documents for retrofits
- Management of recovered refrigerant
- Factoring in energy efficiency of retrofits
Proposed Funds Disbursement

- GGRF funds are disbursed on a reimbursement system

- Reimbursement:
  - Paying for engineering design services rather than equipment cost (although that amount may not be enough for the funding award)
  - Paying for partial equipment
  - Paying for the wholesale refrigerant purchase and/or valves for the refrigerant conversion, which should cover 25% of the cost of a refrigerant retrofit
Timeline and Supermarket Planning

- Solicitation period (8 weeks) and supermarket planning over the next few months
Public Agency Announcements

- California Public Utilities Commission (CPUC)
- Southern California Edison (SCE)
- Los Angeles Department of Water and Power (LADWP)
- Sacramento Municipal Utility District (SMUD)
Stakeholder Feedback
Please provide feedback by March 15, 2020

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Extra Slides
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## California Climate Investments

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<td>Encourage projects that contribute to other State goals</td>
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<td>Target investments that benefit priority populations</td>
<td>Coordinate investments and leverage funds where possible to provide multiple benefits and to maximize benefits</td>
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<td>Maximize economic, environmental, and public health co-benefits to the State</td>
<td>Conduct outreach to help potential applicants access funding, particularly for priority populations</td>
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<td>Foster job creation and job training, wherever possible</td>
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<td>Avoid potential substantial burdens to disadvantaged and low-income communities</td>
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<td>Ensure transparency and accountability and provide public access to program information</td>
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Priority Populations

- Disadvantaged communities
  - Census tracts identified as disadvantaged by CalEPA per SB 535
- Low-income communities
  - Census tracts identified as low-income per AB 1550
- Low-income households
  - Low-income households per AB 1550
GGRF Funding Deadlines

- Encumbrance deadline (2 years from GGRF funding appropriation)
  - Allocated – July 1, 2019
  - Deadline – June 30, 2021

- Liquidation deadline (4 years after encumbrance deadline)
  - June 30, 2025
Goal of the FRIP based on SB 1013

Facilitate the adoption of low-GWP refrigerant technologies for new and existing stores and

- Maximize HFC emission reductions
- Benefit priority populations to the extent possible
- Support training in low-GWP technologies
- Proper refrigerant management
- Facilitate information sharing about low-GWP technologies
- Identify matched funding opportunities