



CDFA OFFICE OF  
**FARM to FORK**

State of California  
California Department of Food and Agriculture  
Office of Farm to Fork  
**2023 URBAN AGRICULTURE GRANT PROGRAM**  
Subaward Written Agreement  
Reporting Guide

Community Based Organizations (CBO) awarded a Track 1 Systems Builder Community-Based Block Grant, must adhere to the following minimum requirements when managing subaward contracts.

The California Department of Food and Agriculture (CDFA) will request a completed **Written Agreement**. Written Agreements act as proof of payment and will be due upon submission of an Advanced Payment Liquidation or Reimbursement invoicing cycle where subaward funds are being claimed. Invoicing reimbursements may be submitted monthly or quarterly based on awardees preference. Advanced payments will follow standard [Advanced Payment Guidelines](#). The Written Agreement acts as your proof of payment document which is required for the invoicing of every subaward distributed. If a Written Agreement along with required attachments, is not submitted by the awarded Track 1 CBO, funding in the form of reimbursement or the processing of additional Advanced Payment requests may be denied at the discretion of the CDFA.

**Purpose:**

The purpose of the Track 1 Systems Builder Community-Based Block Grant is to increase staff capacity for Community-Based Organizations (CBO's) with grassroots involvement in urban and regional food systems planning to provide pass-through funding to priority population, urban agriculture stakeholders in their region. Pass through funding, referred to as subawards, can range from \$5,000 to \$60,000 per subaward. CBO's may provide subawards to recipients as an Advance Payment or as a Reimbursement.

Track 1 project awardees have been designated to serve one of the urban regions of California listed below. See Appendix A for a full list of urban areas for each region.

- Bay Area: East Bay, North Bay, South Bay
- Fresno: Fresno, Bakersfield
- LA: Los Angeles, Long Beach
- San Diego: San Diego
- Inland Empire: San Bernardino, Riverside
- Statewide

## **Sub-awardee Eligibility:**

Sub-awardees may be for-profit organizations and businesses, non-profit organizations, individuals, or Native American individuals and Tribal governments operating an urban agriculture project within 25 miles of an urban area located within the urban region of the Track 1 grantee. Tribal applicants are exempt from the requirement to be in an urban area and may be located anywhere. All Native American individuals and Tribal governments are eligible to apply.

Priority will be given to urban agriculture projects led by or serving priority populations. Priority Populations will be identified using the [California Air Resources Board's California Climate Investments Priority Populations map](#). Subawards to eligible stakeholders can fund infrastructure, equipment, workforce development, community engagement efforts, operations or technical assistance needs. Subaward projects must accomplish one or more of the following:

- **Build Social Capital and Gather Communities:** Demonstrate community engagement practices.
- **Provide Education and Skills Development:** Provide employment development opportunities, especially youth employment and development opportunities.
- **Supplement Access to Fresh Food:** Support the viability of urban food cultivation, processing, or distribution.
- **Cultivate Agricultural Literacy:** Provide educational opportunities as it relates to growing or consuming locally grown seasonal produce.
- **Perform Ecosystem Services:** Provide urban greening, habitat restoration and environmentally beneficial services such as but not limited to planting hedgerows, native plant gardens or food forests.
- **Support Economic Development:** Create new market opportunities and spur entrepreneurial activity.
- **Increase Food Sovereignty:** Creates or supports spaces for community members to provide themselves with healthy and culturally appropriate food produced through ecologically sound and sustainable methods.
- **Pilot an Innovation in Production:** Such as but not limited to mushroom propagation, aquaponics, aeroponics, hydroponics, rooftop gardens or warehouse farms.

## **Allowable Costs:**

### Indirect Costs:

Up to 30% of the total subaward funds may be used for Indirect Costs, such as: grant administration, accounting, printing, or utilities associated with the program.

### Direct Costs:

At least 70% of subaward funds must be used for direct program implementation, including infrastructure, equipment, technical assistance, workforce development or community engagement.

***Examples include but are not limited to the following:***

### Infrastructure:

- Site development, plans and drawings, permits, legal fees, consultant fees
- Season extension such as hoop houses, high tunnels, shade houses, green houses
- Irrigation systems including water connection, installation, improvements, meters, hardware
- Tool storage sheds or containers
- Wash and pack areas including shade structures, drainage pits or other needs
- Community gathering spaces including picnic tables, DG pathways, seating for workshops or other engagement activities, shade structures, outdoor kitchens, demonstration sites
- Aggregation and distribution preparation areas
- Land improvements including soil testing, amendments, remediations, weed management
- Innovations in production equipment such as hydroponic or aquaponic systems

#### Technical Assistance:

- Peer to Peer TA providers to mentor, train, and support urban farmers and community-based organizations
- Recognized experienced TA providers to mentor, train, and support urban farmers and community-based organizations
- Business planning
- Forming cooperatives
- Marketing and communications
- Food safety certifications
- Climate smart agriculture certifications, such as: transition to organic
- Evaluation, data collection, quantitative and qualitative reports on impact of project
- Design, Planning and Implementation consultants and contractors for:
  - Weed management
  - Irrigation
  - Soils
  - Site development
  - Navigation of permits and legal processes
  - Website development

#### Workforce Development & Operations:

- Staff capacity to operate programming
- Internship stipends or hourly pay
- Professional development opportunities
- Ensuring youth from all backgrounds have access to paid positions developing urban food systems

#### Community Engagement & Education:

- Community workshop development and materials
- Staff capacity to operate community engagement activities
- Translation services for community engagement at an urban farm

- Open house tours and fieldtrips for residents, students, elderly, or other underserved community members
- Agritourism

Supplies:

- Tools including hand tools, mechanized tools, harvesting tools, weed management tools etc.
- Post-harvest wash stations, bins, boxes, labels, packaging etc.
- Farm stand, Community Supported Agriculture, or other marketing supplies
- Technology and software for sales, marketing, and communications
- Technology and software for field management

Equipment:

- Delivery vehicles
- Walk behind tractors
- Tractors
- Soil mixers, woodchippers, shredders, and threshers
- Refrigeration units for storage of fresh produce grown by the subaward recipient and additional community partners if applicable. See refrigeration requirements in Appendix D.

Equipment Guidelines:

It is highly recommended that Track 1 awardees collect a completed Equipment Inventory Record which serves as a Property Record, for every piece of equipment purchased. You will find this form in Appendix B. These are to be filed internally by the CBO.

Track 1 CBOs are encouraged to collect the Equipment Inventory Record and submit to CDFA upon receipt from the sub-awardee. This is not required but may be requested if selected for an audit.

Equipment is defined as: *Tangible personal property having a useful life of more than one year and a per-unit acquisition cost of \$5,000 or more. The acquisition cost includes the cost of any necessary accessories and all incidental costs incurred to put the asset into place and ready for its intended use.*

*a. Special purpose equipment is used only for research, scientific, or other technical activities. For example, electron microscopes, spectrometers, and dairy digesters are special purpose equipment.*

*b. General purpose equipment is not limited to research, scientific or other technical activities. For example, office equipment and furnishings, modular offices, telephone networks, information technology equipment and systems, air conditioning equipment, reproduction and printing equipment, and motor vehicles are general purpose equipment.*

CBOs are recommended to follow the Equipment Guidelines described here:

[Grant Administration Regulations Section 324.1 Property Records \(Equipment Inventory Record\) and 324.2 Disposition of Equipment.](#)

**Subaward Program Requirements:**

Track 1 CBO's must provide a Written Agreement to CDFA as proof of payment for every subaward distributed. CBO's may submit Written Agreements as Reimbursement Requests on a monthly or quarterly basis depending on their desired invoicing cycle. If the CBO is using Advanced Payments to distribute their subaward funds, the CBO would be required to submit their Written Agreements as part of their Advanced Payment Liquidation Request.

Written Agreements are the Following Completed Documents:

- a. Table 1.0 (template provided)
- b. Subaward Budget (template provided)
- c. Subaward Invoice

**Subaward Invoice:**

Subaward invoices are invoices generated by Track 1 CBO's and submitted to CDFA as verification of the payment of the subaward/pass through funding, to the subaward recipient. For each subaward, a subaward invoice shall be included from the Track 1 CBO to CDFA that provides sufficient detail and information to allow a determination that the expenditures invoiced are necessary to the performance of the grant award, and reasonable and allowable. Invoices lacking sufficient detail may be disallowed. Examples of acceptable Subaward Invoices include: a ledger, copy of cut checks to sub-awardees, internal memos describing the funding or other documentation showing proof of the expense that subaward funding has been distributed.

The information in the Written Agreement may be collected by the Track 1 CBO on behalf of the sub-awardee. The sub-awardee is not required to fill the Table 1.0 Written Agreement directly. CBOs are responsible for checking the accuracy of the information provided.

**Internal CBO Records to Keep for Each Subaward:**

Track 1 CBOs are ultimately responsible for ensuring that sub-awardees complete the necessary deliverables listed in the Written Agreement. Track 1 CBOs must collect proof of payment from their sub-awardees and keep in their internal files for three years from the end of the CDFA grant term end date. The receipts collected from sub-awardees are not submitted to CDFA but kept by the CBO internally. CDFA may request invoice backups during spot audits to ensure that sub-awardees have spent funds as reported in the Written Agreement.

CDFA recommends that CBOs create a Memorandum of Understanding (MOU) or some form of written contract defining the terms between Track 1 CBOs and sub-awardees. MOUs or contracts should be signed by both parties. MOUs and contracts should include the requirement that sub-awardees must submit all proofs of payment for purchases made using subaward funding to their Track 1 CBO. CBOs should be able to verify that sub-awardees have expended funds in the manner approved by their Written Agreement.

**Table 1.0 Written Agreement Instructions:**

Below is the instructional guide for completing Table 1.0. The right-hand column provides directions on the information to be collected. All fields of Table 1.0 are required unless specifically indicated in the instruction's column. Incomplete Table 1.0's will not be accepted and will be considered out of compliance for processing Reimbursement Requests or Advanced Payment Liquidation Requests. Table 1 includes a field for all required attachments including the budget and subaward invoice. (A blank Table 1.0 will be provided)

<b>Table 1.0</b>	<b>Instructions</b>
Subaward Contract Number	Simply start with #1 for your first subaward contract and go in order of processing.
Name of CBO Staff Member	Person from the Track 1 Community Based Organization (CBO) assisting with the completion of this form or reviewing this form for submission to CDFA.
Email of CBO Staff Member	Email address of person from the Track 1 CBO.
Name of Sub-awardee Farm/Organization	If applicable, include the name of the business or organization.
Name of Lead Applicant	Name of individual applying for the subaward either for themselves or on behalf of their organization/business.
Name of Project	Title of the project (*not required).
Address of Project	The location where the project will take place. Provide a full street address including zip code. If the vacant lot does not have an official address the sub-awardee may provide the address of the nearest building with a description such as: "West of 123 First St, Sacramento, CA 95820."
Mailing Address of Lead Applicant	The mailing address of the project lead. A home address, PO Box or office address, if applicable.
Phone Number of Lead Applicant	Phone number of sub-awardee.
Email of Lead Applicant	Email address of sub-awardee.
Website and/or social media	Website address or social media accounts related to the subaward project (*not required).
Start Date of Contract	When was the sub-awardee officially approved for funding.
End Date of Contract	When does the sub-awardee have to complete their project by, spending all funds, submitting proofs of payment to CBO's and completing deliverables.
Dollar Amount Requested	How much was requested by the applicant.
Dollar Amount Funded	How much was awarded to the applicant.

Project Description	Provide a brief background of the project. What exists now and or has been accomplished to date. Describe the goal(s) of this project. 200 word minimum.
Project Deliverables	List the deliverables/measurable objectives of this project.  Example: <ul style="list-style-type: none"> <li>• Purchase tractor to increase production.</li> <li>• Pay 4 youth interns \$1000/month for 6 months</li> </ul>
Activity 1	Each activity can be structured as a basic work plan.  Include a description of the activity to be accomplished, a date (month and year) by which said activity will be accomplished, and the cost associated with said activity.  Example: <ul style="list-style-type: none"> <li>• Buy Tractor / Sept 2025 / \$50,000</li> </ul> Please add additional activity lines as needed.
Activity 2	
Activity 3	
Activity 4	
Activity 5	
Activity 6	
Payment Provisions	<ul style="list-style-type: none"> <li>• How will the sub-awardee receive funds? <ul style="list-style-type: none"> <li>○ One lump sum</li> <li>○ Several payments over time (describe)</li> <li>○ CBO will be making purchases on the behalf of the sub-awardee</li> <li>○ Other (describe)</li> </ul> </li> <li>• Who will the check(s) be made out to and how will they be delivered. <ul style="list-style-type: none"> <li>○ Will it be a mailed check, direct deposit, or some other form of transfer of funds?</li> </ul> </li> </ul>
Grant Program Requirements	Is the sub-awardee a member of a priority population as defined using the <a href="#">California Climate Investments Priority Populations</a> mapping tool? <input type="checkbox"/> Yes <input type="checkbox"/> No  Is the sub-awardee serving a priority population as defined using the <a href="#">California Climate Investments Priority Populations</a> mapping tool? <input type="checkbox"/> Yes

	<p><input type="checkbox"/> No</p> <p>Use the link provided. Sub-awardees who meet one of the above are required to receive priority for subaward funding. Has priority been given to priority population subaward applicants on behalf of the CBO?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Select which of the following below is being achieved by this funding. At least ONE of the Benefits of Urban Agriculture below MUST be selected:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <u>Provide Education and Skills Development:</u> Provide employment development opportunities, especially youth employment and development opportunities.</li> <li><input type="checkbox"/> <u>Build Social Capital and Gather Communities:</u> Demonstrate community engagement practices.</li> <li><input type="checkbox"/> <u>Supplement Access to Fresh Food:</u> Support the viability of urban food cultivation, processing, or distribution.</li> <li><input type="checkbox"/> <u>Cultivate Agricultural Literacy:</u> Provide educational opportunities as it relates to growing or consuming locally grown seasonal produce.</li> <li><input type="checkbox"/> <u>Perform Ecosystem Services:</u> Provide urban greening, habitat restoration and environmentally beneficial services such as but not limited to planting hedgerows, native plant gardens or food forests.</li> <li><input type="checkbox"/> <u>Support Economic Development:</u> Create new market opportunities and spur entrepreneurial activity.</li> <li><input type="checkbox"/> <u>Increase Food Sovereignty:</u> Creates or supports spaces for community members to provide themselves with healthy and culturally appropriate food produced through ecologically sound and sustainable methods.</li> <li><input type="checkbox"/> <u>Pilot an Innovation in Production:</u> Such as but not limited to mushroom propagation, aquaponics, aeroponics, hydroponics, rooftop gardens or warehouse farms.</li> </ul>
Equipment Purchase	<p>Will equipment be purchased as part of this subaward?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
Subaward Budget	<p>Attach a completed budget reflecting each activity/cost listed, as well as any indirect costs.</p> <p>Indirect costs may be up to 30% of the total cost associated</p>



	<p>with the subaward project. A simple line item reflecting indirect cost is sufficient. No itemized description is required.</p> <p>The total cost of activities listed must match invoicing for all direct costs incurred.</p> <p>See Appendix C. for Template. A fillable Excel Spreadsheet will be provided to you upon request. Email <a href="mailto:caurbanag@cdfa.ca.gov">caurbanag@cdfa.ca.gov</a> for your fillable Subaward Budget Form.</p>
Subaward Invoice	Track 1 awardees must submit to CDFA a ledger, copy of cut checks, internal memo or something showing proof of the expense that subaward funding has been distributed.
Signature of CBO Staff	Signatures may be electronic signatures or handwritten and scanned signatures. Please be sure to include the date.
Signature of Sub-awardee	Signatures may be electronic signatures or handwritten and scanned signatures. Please be sure to include the date.

BLANK TABLE 1.0 WILL BE PROVIDED UPON REQUEST  
EMAIL [caurbanag@cdfa.ca.gov](mailto:caurbanag@cdfa.ca.gov) FOR FILLABLE COPY

**Table 1.0 Written Agreement (EXAMPLE TEMPLATE)**

Subawards Contract Number	
Name of CBO Staff Member Completing Table 1.0	
Email of CBO Staff Member Completing Table 1.0	
Name of Sub-awardee Farm/Organization	
Name of Sub-awardee Lead Applicant	
Name of Project	
Address of Project	
Mailing Address of Lead Applicant	
Phone Number of Lead Applicant	
Email of Lead Applicant	
Website and or social media	
Start Date of Contract	
End Date of Contract	
Dollar Amount Requested by Applicant	
Dollar Amount Funded	
Project Description	

Project Deliverables	
Activity 1	
Activity 2	
Activity 3	
Activity 4	
Activity 5	
Activity 6	
Payment Provisions	
Grant Requirements	<p>Is the sub-awardee a member of a priority population as defined using the <a href="#">California Climate Investments Priority Populations mapping tool</a>?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>

	<p>Is the sub-awardee serving a priority population as defined using the <a href="#">California Climate Investments Priority Populations</a> mapping tool?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Use the link provided. Sub-awardees who meet one of the above are required to receive priority for subaward funding. Has priority been given to priority population subaward applicants on behalf of the CBO?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Select which of the following below is being achieved. At least ONE of the Benefits of Urban Agriculture below MUST be selected:</p> <p><input type="checkbox"/> <u>Build Social Capital and Gather Communities:</u> Demonstrate community engagement practices.</p> <p><input type="checkbox"/> <u>Provide Education and Skills Development:</u> Provide employment development opportunities, especially youth employment and development opportunities.</p> <p><input type="checkbox"/> <u>Supplement Access to Fresh Food:</u> Support the viability of urban food cultivation, processing, or distribution.</p> <p><input type="checkbox"/> <u>Cultivate Agricultural Literacy:</u> Provide educational opportunities as it relates to growing or consuming locally grown seasonal produce.</p> <p><input type="checkbox"/> <u>Perform Ecosystem Services:</u> Provide urban greening, habitat restoration and environmentally beneficial services such as but not limited to planting hedgerows, native plant gardens or food forests.</p> <p><input type="checkbox"/> <u>Support Economic Development:</u> Create new market opportunities and spur entrepreneurial activity.</p> <p><input type="checkbox"/> <u>Increase Food Sovereignty:</u> Creates or supports spaces for community members to provide themselves with healthy and culturally appropriate food produced through ecologically sound and sustainable methods.</p> <p><input type="checkbox"/> <u>Pilot an Innovation in Production:</u> Such as but not limited to mushroom propagation, aquaponics, aeroponics, hydroponics, rooftop gardens or warehouse farms.</p>
Equipment Purchase	<p>Will equipment be purchased as part of this subaward?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>See Appendix B. Equipment Inventory Record</p>

Subaward Budget	Attach a complete budget. See Appendix C for Template. A fillable Spreadsheet will be provided to you upon request. Email <a href="mailto:caurbanag@cdfa.ca.gov">caurbanag@cdfa.ca.gov</a> for your fillable Subaward Budget Form.
Subaward Invoice	Attach Subaward Invoice. Track 1 awardees must submit to CDFA a ledger, copy of cut checks, internal memo or something showing proof of the expense that subaward funding has been distributed.
Signature of CBO Staff	
Signature of Sub-awardee	

## **APPENDIX A.**

Sub-awardees must be within 25 miles of one of the cities below to apply in any given region. This can be calculated using Google Maps or some other mapping app by entering the urban area and the directions to the address of the project. Native applicants are exempt from this requirement.

- Bay Area
  - Oakland
  - San Francisco
  - Union City
  - Santa Clara
  - Daly City
  - Redwood City
  - Santa Rosa
  - Vallejo
  - Livermore
  - Petaluma
  - Napa
  - San Rafael
  - Milpitas
  - Cupertino
  - San Leandro
  - Berkley
  - Fremont
  - Concord
  - Alameda
  - Sunnyvale
  - Hayward
  - Antioch
  - San Ramon
  - Palo Alto
  - South San Francisco
  - San Ramon
  - Mountain View
  - Gilroy
  - Pleasanton
  - San Jose
- Fresno
  - Fresno
  - Clovis
  - Bakersfield
  - Delano
- Los Angeles
  - Los Angeles
  - South Gate
  - Inglewood
  - West Covina
  - Palmdale

- Glendale Pasadena
- Huntington Park
- Baldwin Park
- Santa Monica
- Long Beach
- Downey
- Burbank
- Norwalk
- Whittier
- Alhambra
- Lakewood
- Cerritos
- Compton
- Santa Clarita
- Torrance
- El Monte
- Pomona
- Redondo Beach
- Bellflower
- Lynwood
- Rosemead
- Monterey Park
- Diamond Bar
- San Diego
  - San Diego
  - National City
  - Escondido
  - Encinitas
  - Chula Vista
  - Oceanside
  - San Marcos
  - Santee
  - Carlsbad
  - Vista
  - El Cajon
  - La Mesa

**APPENDIX B.**

State of California  
 California Department of Food and Agriculture  
 Office of Farm to Fork (CDFA-F2F)  
 CA Urban Agriculture Grant Program  
 Equipment Inventory Record

F2F- 0213 (Est 5/2024)

Submit To:  
 Office of Farm to Fork, Urban Agriculture Grant Program  
 California Department of Food and Agriculture  
 caurbanag@cdfa.ca.gov

Instructions:

- Section 1: Complete Section 1 upon purchasing a piece of equipment with grant funds. Submit this form (Section 1 only) to the CDFA Urban Agriculture Grant Program when you either: (a) submit a reimbursement request for the equipment, or (b) submit advance payment expense documentation for the equipment.
- Section 2: Complete Section 2 at the end of the grant agreement term. Submit this form (Sections 1 & 2) to the CDFA Urban Agriculture Grant Program when you submit your final invoice.
- Section 3: Complete Section 3 after contacting the CDFA Urban Agriculture Grant Program for disposition of equipment.

**SECTION 1: Complete this section upon purchasing a piece of equipment with grant funds.**

RECIPIENT NAME (as it appears on grant agreement)		GRANT AGREEMENT NUMBER (assigned by CDFA)	
MANUFACTURER and MODEL		SERIAL # or OTHER ID #	
DESCRIPTION of ITEM			
LOCATION of EQUIPMENT		USE and CONDITION of EQUIPMENT	
WHO HOLDS TITLE	ACQUISITION DATE	ACQUISITION COST	



**SECTION 2:** Complete this section at the end of the grant agreement term.

FAIR MARKET VALUE of EQUIPMENT

DATE PREPARED

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INTENDED PURPOSE OF EQUIPMENT AFTER GRANT PROJECT ENDS

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**SECTION 3:** Complete this section when disposing of equipment (*Contact [caurbanag@cdfa.ca.gov](mailto:caurbanag@cdfa.ca.gov) PRIOR to disposition of equipment*).

DATE DISPOSED

HOW DISPOSED

--	--

VALUE at TIME of DISPOSITION

SALE PRICE (if sold)

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APPENDIX C. (EXAMPLE TEMPLATE)

## SUBAWARD BUDGET

2023 CDFA Urban Agriculture Grant Program		
Track 1: (Name of your CBO organization)		Sub awardee Org Name:
CBO Staff Person Name:		Sub awardee Applicant Name:
Mailing Address:		Sub awardee Mailing Address:
City, State, Zip:		City, State, Zip:
Phone:		Phone:
Email:		Email:
Date:		
Award Amount: \$		
<b>Personnel: Salary and Wages</b>	<b>Amount \$</b>	<b>Narrative Description of Budget Line Item</b>
<b>Personnel: Fringe Benefits</b>		
<b>Infrastructure</b>		

<b>Technical Assistance</b>		
<b>Travel</b>		
<b>Consultant/Contractor</b>		

<b>Supplies</b>		
<b>Other</b>		
Indirect Cost (0%-30%)		____%
<b>TOTAL</b>	<b>\$0.00</b>	

## APPENDIX D.

### ➤ Refrigerant Requirements:

- Many refrigerants used today are very potent greenhouse gasses. Global warming potential (GWP) is the metric used to compare the relative warming impacts of greenhouse gasses, including refrigerants.
- The most climate-friendly refrigerants have low global warming potential (GWP) values.
- Units selected for this grant should have the lowest GWP value possible.
- Conventional, high GWP refrigerants are being phased out and their prices are expected to increase rapidly in the coming years. Buying climate-friendly refrigerants will ensure that costs of replacing leaked refrigerants are kept low throughout the unit's lifetime.
- Examples of ultra-low GWP refrigerants that are climate-friendly include CO<sub>2</sub> (R744), propane (R-290) and isobutane (R-600a). The availability of these refrigerants varies depending on the type of equipment.

### ➤ Equipment Sizes & Types:

- If you are using a Cool Bot to convert a window air conditioning unit as your source of refrigeration, the air conditioning unit must be Energy Star certified.
- Standalone units (i.e., self-contained refrigerated cases) must use hydrocarbon refrigerants for this program (R290 or R600a), if available. Hydrocarbon refrigerants are flammable; however, the design of the equipment and the limits on the amount of refrigerant used ensure product safety.
- A line-up of self-contained display cases, using propane (R-290) refrigerant, can be used in conjunction with a water loop circuit and dry air cooler/chiller external to the building (also known as, Micro-distributed).
- Larger systems, (i.e., remote condensing units – usually sited outside a building) that contain more refrigerant may be required to run larger equipment for e.g., large walk-in coolers or several pieces of equipment (a line-up of display cases). In these cases, CO<sub>2</sub> should be used if available.
- If CO<sub>2</sub> is not available, mid-range GWP refrigerants including R-448A and R449A are permitted.
- Systems that contain over 50 pounds of refrigerant must be registered with the California Air Resources Board (CARB) Refrigerant Management Program. Grantees must select the lowest GWP refrigerant available for the type of unit being purchased when there is a choice.