Request for Proposals

Supply, delivery and installation of solar-powered cold storage facilities at City Park (Fresh Produce) Market in Nairobi to reduce methane emissions associated with organic waste and accelerate the transition to clean energy

C40 Cities Climate Leadership Group, Inc.
120 Park Avenue, 23rd Floor
New York, NY 10017
United States of America.

July 2024

1. C40 Cities Climate Leadership Group Inc. (“C40”)

C40 is a network of nearly 100 mayors of the world’s leading cities, who are working to deliver the urgent action needed right now to confront the climate crisis, and create a future where everyone, everywhere can thrive. Mayors of C40 cities are committed to using a science-based and people-focused approach to help the world limit global heating to 1.5°C and build healthy, equitable and resilient communities. Through a Global Green New Deal, mayors are working alongside a broad coalition of representatives from labour, business, the youth climate movement and civil society to go further and faster than ever before.

The strategic direction of the organisation is determined by an elected Steering Committee of C40 mayors which is co-chaired by Mayor Sadiq Khan of London, United Kingdom, and Mayor Yvonne Aki-Sawyerr of Freetown, Sierra Leone. Three term Mayor of New York City Michael R. Bloomberg serves as President of the C40 Board of Directors, which is responsible for operational oversight. A nine-person management team, led by Executive Director, Mark Watts, leads the day-to-day management of C40. C40’s three core strategic funders are Bloomberg Philanthropies, the Children’s Investment Fund Foundation (CIFF) and Realdania.

To learn more about the work of C40 and our cities, please visit our Website, or follow us on Twitter, Instagram, Facebook and LinkedIn.

2. The UCAP Climate Action Implementation (CAI Programme)

The Climate Action Implementation (CAI) Africa Programme is part of a new, broader UK Government funded Urban Climate Action Programme (UCAP) that aims to work with cities in Africa, Latin America and Southeast Asia to implement high-impact, priority climate actions and to integrate climate action into city plans, processes and structures.

In Africa, the CAI programme aims at providing technical assistance and capacity building to seven metropolitan cities across the region to enable climate change mainstreaming and action implementation of two key sectors: (i) waste and (ii) energy & buildings.

This programme focuses on the policies and projects that can deliver the most significant emissions and risk reduction impact and wider benefits in support of green and just recovery from the COVID-19 pandemic. The programme also aims to engage other cities across the region to share knowledge and lessons learned on climate action implementation.

3. Summary and Background of the Project

3.1. Overview of Nairobi City County

Nairobi is the capital and largest city in Kenya and among the fastest-growing cities in East and Central Africa. It has complex temporal and spatial distributions of population, infrastructure, and socio-economic activities. A comparison of national and city-level total GHG emissions shows that Nairobi currently accounts for approximately 5% of Kenya's total emissions. As the largest city in Kenya, the city's share of national emissions is projected to grow over time. Nairobi was renamed a county (Nairobi City County) and consolidated into a city county in the wake of the New Constitutional Dispensation in 2010.

Rapid urbanisation and unplanned settlements driven by population growth and urban poverty led the city to urgently act to mitigate and adapt to climate change. Under C40's Deadline 2020 programme, Nairobi City County Government (NCCG) developed and launched an ambitious Climate Action Plan (CAP) that aligns with the global goal of limiting the average temperature rise to 1.5°C. NCCG is committed to implementing the ideal set of actions required to become carbon neutral by 2050.

The Climate Change and Air Quality Monitoring Directorate under Green Nairobi (Environment, Water, Food & Agriculture) is responsible for coordinating and advancing the City's climate change agenda and will focus on policies and actions to deliver net zero carbon municipal buildings, through energy retrofits, on-site renewable energy systems deployment and developing treatment capacity for organic waste.

Due to an annual population growth rate of about 4% annually, there is an ever increasing demand for energy in the city and while the energy sector has been expanding rapidly, it remains characterised by limited access, unstable and unreliable supply. According to Nairobi's Climate Action Plan (CAP), the city is vulnerable to heat, drought and floods, which all have a negative impact on food security and availability of water for hydro electricity production.

As such, Nairobi recognises the need to diversify its energy sources, build a resilient clean energy supply by upscaling renewable sources and boosting the climate adaptive capacity and energy independence of vulnerable urban communities especially informal communities where most of the city market traders reside. Nairobi, being a city and a county has a critical role to play in energy development. A key challenge facing Nairobi's energy security is due to inadequate generation capacity which is due to demand outpacing supply and electricity generation being rainfall dependent.

3.2 C40 CAI's pre-scale-up implementation initiative

Though C40's CAI Africa programme is geared towards providing support to cities in preparation for scaled up climate action, this has exclusively been provided in the form of technical assistance. Since 2023, the cities have requested support for the implementation of on-the-ground projects to inform climate-sensitive development within their jurisdictions. Nairobi was selected as one of two cities that will participate in the "Pre-Scale-Up Implementation Initiative", the other being Lagos where a biogas digester is proposed as a solution to reduce methane waste at a fresh produce market site. This is in line with CAI and the NCCG's ambition to reduce greenhouse gas emissions from various sources, including diverting organic waste from landfills as well as reducing energy-related emissions.

3.3. Overview of Nairobi City County markets

City Park Market is one of the 65 city markets in Nairobi with unreliable electricity connection. The high cost of electricity and unreliable supply from the grid prevents market traders from investing in sustainable storage facilities and refrigeration, leading to increased food waste and loss, as the shelf life of fresh produce is reduced. It is therefore crucial for markets to enhance city market traders' capacity in preserving produce for longer durations. Market sellers play an important role in food security for communities in and around Nairobi by selling fresh, healthy produce at affordable prices. The market sellers themselves are also low income earners who earn a meagre living from working at city markets and are part of the indigent communities in the city, usually residing in neighbouring informal settlements.

3.4 Location of the pre-scale-up project

The pre-scale-up project will be implemented at City Park Market, GPS coordinates: 1.2616° S, 36.8258° E. The exact location of the proposed equipment within the market should be indicated by the bidder following their attendance to the site briefing.

Image 1: City Park Market with grey roof. Google Earth 2024

The City Park Market was put forth by the NCCG as one of the areas they would like this project to be implemented. City Park Market is one of the 65 city markets in Nairobi with unreliable electricity connection and high levels of food waste and loss. This market is being considered for this pre-scale-up because it is well organised and managed by the Market Committee representing market traders, its scale (about 1,500 traders work there) and strategic location for ease of management of the project by the city administration. Its central location is also ideal to showcase the project for scaling up & replicability across the city. The market is also one of the most recently refurbished city markets and harbours a huge parking lot that can be used for installation of solar PV unlike other city markets.

4. Challenge and proposed solution

From the Preliminary Energy Gaps & Needs Assessment work undertaken across four (4) major city markets in Nairobi, it was revealed that 20% of organic produce goes to waste due to inadequate access to cold storage facilities. Without proper temperature control, fresh produce can spoil within days under ambient temperatures and humidity in Nairobi. While a few fresh produce traders have their own small refrigeration units to store their produce, they tend to be energy-inefficient and consume a significant amount of electricity with some traders making use of diesel generators. There are 65 markets in Nairobi, with City Park Market being among the largest city markets with 1,500 market traders operating at the market. Food wastage results in unfavourable conditions which include higher methane emissions and higher food prices. Based on the 20% waste amongst traders (3.1 kg a day), the amount of organic food waste generated each year at City Park Market could reach 1,600 tonnes per year, resulting in around 3,500 tCO2 emitted at the landfill.

Addressing this challenge, a pre-scale-up project is proposed to be implemented at City Park Market. A preliminary design of the cold storage and solar PV system has been put forward. The proposed solution incorporates installing a 10 metric tonnes (MT) cold storage room with a 10 kWp in-built solar system. This hybrid solar cold room is designed to be used throughout the year, even in cloudy conditions by automatically changing over to alternative power sources in the absence of sunlight. The "Plug & Play feature" of the hybrid solar cold rooms makes it suitable to meet the energy requirements of the market traders and market managers. These include size of the solar panel, capacity of the room, thickness of insulation, capacity of energy storage by batteries, energy management ability and the power of the refrigeration unit.

It is a portable system that comes with real-time monitoring and control systems allowing anyone with access to view the monitoring system online. The solar panels will provide reliable electricity supply to City Park Market since the market is currently without a reliable power source and depends on illegal and hazardous connections. This stand-alone, hybrid cooling system is designed to operate reliably in regions with challenges of regular power interruption. To make sure that this system will not be moved from this market, extensive stakeholder engagements will be undertaken to make sure that city market traders, market committee & management have the mandate to protect the system and act as a guarantee that it will not be moved to any other location. This will also be stipulated in the Letter of Support from the city administration as well as any Agreements with the City Park Market Management.

Image 2 and 3: Solar-powered cold storage solution

Deployment of high efficiency solar panels will be key in ensuring a good energy output. A real-time monitoring system through a mobile or remote-based application would allow the City to collect data to inform the effectiveness of the proposed solution.

The implementation of this pre-scale-up project will also provide an opportunity for testing an applicable business model that is relevant for scaling up the same or similar interventions in other city markets. The business model will incorporate a small fee to the market traders/stallholders, in a "flexible pay-as-you-store subscription model" that will make the project self-sustaining in the longer term.

5. Reduction in emissions

Though this RfP only addresses Phase 1 emissions, C40 has also mapped out potential emissions that can be achieved through implementation of subsequent phases of the project. The NCCG's ambition is to move towards a scaled project with interventions that reduce organic waste at Nairobi's markets.

- **Phase I:** It is estimated that a 10kWp solar-powered cold storage unit would generate a total of 13,309 kWh of electricity per year and prevent 99 tonnes of organic waste from going to landfill, resulting in a reduction of 125 tCO2e annually. It would also avoid 2 tonnes of tCO2e from grid emissions annually. 6% of annual waste will be reduced if this project's solution is to be implemented.
- **Phase II:** If the solar PV energy production is scaled up to meet the energy needs of 50% of market traders (given that not all traders require onsite cold storage facilities) in City Park Market, 93,163 kWh of energy could be generated and 17 tCO2 could be avoided annually. Moreover, this would also prevent 684 tonnes of organic waste from being sent to landfill, resulting in a reduction of 1,587 tonnes of tCO2.
- **Expansion to all city markets:** Further emissions can be avoided if the project were to be expanded to all markets in Nairobi: assuming 50% of traders can access and use the solar PV-powered cold storage units, 2,941,714 kWh can be generated and 541 tCO2 can be avoided per year, with a further 21,613 tonnes of organic waste saved from landfill and 29,607 tCO2 avoided per year. This concept note reflects only direct emission reductions and excludes upstream emission reductions from a reduction in food production, water savings at farms and reduced fertilisers used.

6. Project objectives and outcomes

The project's main aim is to test sustainable alternative solutions that improve cooling efficiency, while reducing energy consumption with the ultimate aim of reducing methane emissions associated with organic waste generated at City Park Market to inform a city-wide programme to transition Nairobi's markets. Key objectives that this pre scale-up project is expected to deliver include:

- To reduce food waste, GHG emissions and divert waste from landfill.
- To test the technology in the context of city markets and relevant business models to inform a larger city-wide programme.
- To identify specific needs for implementation to inform a scaled up proposal for implementation.
- To reduce energy consumption and operating costs for market traders and NCCG.
- To provide reliable, sustainable energy to market traders.

Expected outcomes of the pre scale-up are listed below:

- Improved clean energy access at City Park Market
- Reduced food waste and losses from the market
- Energy savings for both market traders & NCCG in the longer term
- Cost savings for both market traders & NCCG in the longer term
- Enhancing resilience to climate change because of the reliable energy supply
- Enhance economic resilience to market traders who depend on the fresh produce for their livelihood
- An established methodology to roll-out in other markets to roll-out across the city and beyond
- Reduced methane emissions due to less organic material going to landfill.
- Strengthened procurement processes and systems for further implementation of similar projects in the city while building the capacity of relevant city officials to inform decision-making on climate action implementation

7. Purpose of this assignment

C40 Cities together with NCCG is looking for a service provider who will construct, install and maintain a solar powered cold storage facility at City Park Market.

8. Key activities and deliverables

Activity 1: Inception phase

I. An inception meeting will be held between Nairobi City County, C40 and the service provider. The inception meeting will take place in person to go through the objectives and expectations of the project.
II. Following the inception meeting, a site visit will take place to ensure the service provider understands the City Park Market context and environment in order to prepare adequately for the installation.
III. An inception brief will be finalised following both the inception meeting and site visit which will lay out a plan for the rest of the project.

Expected output/deliverables	Inception brief inclusive details from site visit and project plan.
Estimated task time	1 week

Activity 2: Supply, delivery and installation of PV cold storage system

I. In this activity, the service provider is expected to supply, deliver and install a solar-powered cold room storage unit. The specifications for this unit are included in Annex 1. The service provider must ensure that NCCG officials and/or representatives of C40 are present during each stage of the supply, delivery and in particular, installation process. It is important to make sure that the cold room storage unit will be installed in a location without shading and with the right orientation/inclination for maximum sunlight absorption of sunlight and optimal performance.

Expected output/deliverables	Supply delivery and installation of PV cold storage system.
Estimated task time	2 weeks

Activity 3: Set up real-time monitoring system

I. As part of the total package, the service provider must propose and install a real-time energy monitoring system that tracks the output of electricity produced from solar as well as information of energy consumption and data related to battery usage. Weekly and monthly reports must be automated and the monitoring system should interface through a mobile application available on various mobile application stores. The monitoring system must be connected to a mobile or WiFi network.

Expected output/deliverables	Supply, delivery and installation of a real-time energy monitoring system. Interface with a mobile application. Monthly and weekly energy production and consumption reports. The service provider will be required to work closely and collaboratively with a service provider contracted by C40 to undertake an overall M&E framework, baseline and assessment.
Estimated task time	Duration of the contract period.

Activity 4: Preventative maintenance plan & execution

The service provider will be required to develop a Maintenance Manual for the cold storage facility in order to maintain reliable and utmost preservation of produce quality & safety until **December 31, 2025**. This will encompass:

- Establishing a regular cleaning and maintenance program including the cleaning procedure & frequency of cleaning

- Developing a daily, weekly, monthly, quarterly & annual preventative maintenance checklists to prevent fungal growth, ensure proper product arrangement, ensuring optimum condensing unit air circulation etc
- Develop a risk analysis and mitigation plan[1] outline how the facility will be protected.
- Work with the city to appoint staff member/s or market trader/s to do the maintenance of the facility as part of training for handover of maintenance tasks during and after **December 31, 2025**.
- The service provider is expected to provide training with NCCG officials on how to operate the facility and all its parts to market committee members and traders as part of the handover process. A Standard Operating Procedure (SoP) should be established.
- The service provider will assist in providing all necessary documentation for the ownership transfer to the city upon completion of construction, to be led by C40.

To facilitate effective use and acceptance of this facility, the construction, installation, and management of this cold storage facility will involve the active participation of market committee members and traders. Therefore, after the installation, the preferred service provider in coordination with NCCG will train nominated members of the market committee & traders on the use and management of the facility, as well as develop specific systems that will enhance its maintenance and sustainability. Lessons from this process should guide & inform future scale-up plans to other city-wide markets.

Expected output/deliverables	A Maintenance Manual for the cold storage facility A training handover should be provided A Standard Operating Procedure (SoP - in writing) Preparation of handover and transfer documentation
Estimated task time	2 weeks

Activity 5: Post-installation support

Following the installation of the solar-power cold storage unit, the service provider is expected to include a Maintenance Plan up until **December 31, 2025**. Upon completion of instalment of the cold storage facility, the transfer of ownership of the facility to the city (NCCG) will occur immediately. The maintenance of the facility by the service provider will continue until **December 31, 2025**. Maintenance (inspections & routine checks) should be led and carried out by the

[1] It is important to note that one of the key risks is monkeys damaging cold storage facility

service provider together with an appointed staff member/s or market trader/s and this should occur at frequent intervals as required (on a bi-monthly basis).

I. A three-year warranty period should be provided for all parts delivered.
II. A two-year guarantee period should be provided for all parts delivered. Should there be a malfunction on parts, these should be replaced individually or the unit entirely. The Service Provider should define a Spare Part Inventory List and assume overall management for inventory management.

Expected output/deliverables	A one-year maintenance plan should be provided. A three-year warranty should be included. A two-year guarantee should be provided.
Estimated task time	Full project period and taking into account the time-periods of the above.

4.3. Project management

The project management will require close collaboration and excellent communication with C40 and Nairobi City County Government & City Park Market Committee. The following project management meetings are proposed:

- Short bi-weekly check-in meetings (30 minutes with a smaller group) to report on progress, challenges, and plans for communicating assistance needed.
- Ad-hoc project team meetings as needed to resolve issues and review deliverables.
- Project close-out meeting within the last 2 weeks of the contract
- Close collaboration with the city team responsible for the project.
- Engage relevant stakeholders in the city and market associations?

The service provider should allocate sufficient time to prepare for, attend and minute these meetings.

Expected output/deliverables	● Project bi-weekly management meeting notes ● Project close-out report ● All project outputs
Estimated timeline	Full project period

Activity 5: Reporting

The final output will include a word document that confirms the accomplishment of this assignment with all key activities and deliverables as specified under the scope of work.

Expected output/deliverables	● Submission of final bi-monthly progress report ● Submission of a final report that encapsulates all the other reports, activities and deliverables under this assignment
Estimated timeline	During the contract period

5. Project team requirements

Consortia are welcome to bid for this work however all project team members must be included in the proposal. C40 will not take responsibility for coordinating across the different entities, this will be the responsibility of the project lead assigned to the consulting team. Local expertise is critical for the successful delivery of this assignment, especially the stakeholder engagement component. More requirements are highlighted in the proposal evaluation criteria table.

1. Proposal Guidelines

This Request for Proposal represents the requirements for an open and competitive process. Proposals will be accepted until **05 September 2024, at 17:00 EAT (GMT +3)**.

Any proposals received after this date and time will not be accepted. All proposals should include clear timelines, how you will work with C40, clear costs and details on experience in this area. Proposals should be presented with costs including tax and administrative fees.

The proposal should give the city and C40 evaluators all the information they need to assess your bid. Submissions should include:

- Description of your proposed approach to the scope of work, including a proposed methodology for conducting the assignment. Information about the organisation's commitment to equity, diversity and inclusion and ethical alignment with C40.
- List of key personnel who would be working on the contract, their job titles, and responsibilities on the project. The service provider should have technical expertise & experience in installing and managing cold storage facilities especially those that are used for preserving fruits and vegetables. Please include relevant experience and expertise and limit CVs to a maximum of 3 pages per person.
- Examples of previous relevant work/projects highlighting key outputs and impacts achieved.

- The service provider must showcase appreciable experience with the leadership of market committees, municipal/local government authorities and their administrative systems.
- The service provider must submit as part of their bids evidence that labour insurance is provided for.
- The Service Provider must submit as part of their bid evidence of appropriate insurance coverage, including general liability, worker's compensation and professional liability.
- Experience in stakeholder engagements and training is important
- A risk analysis and mitigation plan
- A detailed work plan with a clear timeframe for your tasks and completion of the project (the work should be concluded by **28 February 2025.**)
- A full, detailed project budget breakdown of deliverables and costs inclusive of taxes and hours allocated to tasks per project team member and daily rates of the project team needs to be included in the submission.

Please note: Proposals should be written in English, saved in PDF format. Reference material may be placed in annexes.

2. Supplier Diversity

C40 is committed to supplier diversity and inclusive procurement by promoting equity, diversity and inclusivity in our supplier base. We believe that by procuring a diverse range of suppliers, we get a wider range of experiences and thoughts from suppliers and thus are best able to deliver to the whole range of our diverse cities and the contexts that they operate within.

We strongly encourage suppliers (individuals and corporations) that are diverse in size, age, nationality, gender identity, sexual orientation, majority-owned and controlled by a minority group, physical or mental ability, ethnicity and perspective to put forward a proposal to work with us.

Feel welcome to refer to C40's Equity, Diversity and Inclusion Statement as supplier diversity and inclusive procurement is one element of applying equity, diversity and inclusion to help the world limit global heating to 1.5°C and build healthy, equitable and resilient communities.

3. Contracts

The work will be completed on the FIDIC Silver Book. We reserve the right to penalise your bid on the basis of non-acceptance of terms.

4. Subcontracting

If the organisation submitting a proposal needs to subcontract any work to meet the requirements of the proposal, this must be clearly stated. All costs included in proposals must be all-inclusive of any outsourced or contracted work. Any proposals which call for outsourcing or contracting work must include a name and description of the organisations being contracted.

5. Useful resources

Below is a list of useful resources that may assist interested bidders in developing their proposals:
C40's Inclusive Community Engagement Playbook
C40's Concept Note

6. RfP Key Timeline

RFP Timeline	Due Date
Request for Proposals sent out	26 July 2024
Site visit and briefing at City Park Market. **Please Note:** **It is compulsory** that all interested potential bidders should participate in the site visit and briefing before sending in their bids. All interested potential bidders should notify C40 Cities by/on the **8th August 2024** to obtain site visit/briefing details. All **RSVP** notifications regarding the site visit and briefing should be done by emailing caiafrica@c40.org. All potential bidders at the site visit and briefing shall **sign an attendance register** and this shall be used for cross referencing with bids submitted. C40 Cities **shall not accept** bids from bidders who did not attend the site visit and briefing.	14 August 2024 (TBC)
Questions submitted to C40	21 August 2024
C40 responds to questions	28 August 2024
Deadline for receiving proposal offers	05 September 2024
Successful Suppliers notified of the outcome	19 September 2024
Inception meeting	26 September 2024
Project close-out	28 February 2025

That's fine. Also mention that bidders will need to sign an attendance register at the briefing and we will cross-reference that. C40 will not accept bids from companies who did not attend the briefing. (edited)

7. Proposal Evaluation Criteria

Proposals will be evaluated against the following criteria and weighting:

Evaluation Criteria	Weighting (%)
Robustness of the project delivery proposal: Project delivery approach proposed, including project management approachability to deliver outputs on time and quality	35
Technical Expertise: Expertise and experience of the bidder across relevant topics and focal geography. Including existing work and methods that we can draw on for this work ● Experience supply, delivery and installation of solar-powered cold storage systems.	30
Value for money measured by**:** ● Economy: minimising the cost of resources used / spending less ● Efficiency: the relationship between the output from goods / services and the resources to produce them ● Effectiveness: the relationship between the intended and actual results ● Equity: the extent to which services reach the intended recipients fairly	25
Equity and ethical alignment considerations: C40 is looking to appoint an organisation that shares our values and is grounded in the context of the local community. Consideration will focus on: ● location of organisations (preference will be given to locally based organisations), ● organisations with women and youth ownership are encouraged to apply	10

8. Project budget

The proposal should indicate a cost breakdown structure, outlining the costs for each component of the project (i.e. preliminary scoping, exchanges, venues and resources etc.). Labour and equipment costs need to be quoted separately. All costs included in the proposal must be all-inclusive, referring to any VAT, copyright, bank fees, etc. Costs should be stated as one-time or recurring costs. C40 does not pay contractors more frequently than once per month.

All costs incurred in connection with the submission of this RfP are **non-refundable** by C40.

9. Compliance with C40 Policies

C40 expects third parties to be able to abide by these C40 policies

1. Non-Staff Code of Conduct Policy here
2. Equity , Diversity and Inclusion Policy here
3. C40 Non-Staff Travel and Expenses Policy - if applicable - Here

10. Submissions

Each bidder must submit 1 copy of their proposal to the email address below by**, 05 September 2024, at 17H00 EAT (GMT +3)** to Neema Afwande, Senior Procurement & Programme Officer, caiafrica@c40.org.

All questions related to this RFP by potential bidders should be directed by email to caiafrica@c40.org by the 21st June 2024. Anonymised responses to questions will be provided here before the Q&A period closes.

Disclaimer

C40 will not accept any liability or be responsible for any costs incurred by Potential Suppliers in preparing a response for this RFP.

Neither the issue of the RFP nor any of the information presented in it should be regarded as a commitment or representation on the part of C40 (or any of its partners) to enter into a contractual arrangement. Nothing in this RFP should be interpreted as a commitment by C40 to award a contract to a Potential Supplier as a result of this procurement, nor to accept the lowest price or any tender.

Annex 1: Specifications for cold storage room with a 10 kWp in-built solar system

10 MT cold storage room with a 10 kWp in-built solar system	
Cold room dimension	6.2m x 4m x 2.7m. (ext.)
Solar power capacity	10 kWp
Type of room	Chiller room
Battery backup	Minimum of 24 to 30 hours
Room Temperature in deg C	To be specified
Incoming Products Temp. in deg C	To be specified
Ambient Temperature in deg C	40
Air cooled Freon Refrigeration system (Cooling capacity)	To be specified
Refrigeration system	Compressor make: to be specified Type: to be specified
Heat Exchanger	To be specified
Humidity range	65% to 95%
Remote monitoring	PLC Based with viewable on desktop and smartphones
Solar type	Hybrid solar system
Thermal bank	To be specified
Plant safety measures	To be specified
High Air flow Plate type evaporators	To be specified
Stainless steel thermal energy storage system, humidifier, hybrid solar solution with required accessories, MS external support structure	To be specified
Refrigerant	Must comply with international and national standards and protocols

Internal lighting & PLC based remote monitoring cum controlling system	To be provided
Power supply for refrigeration units	To be specified