REQUEST FOR QUOTATION (RFQ)
Platform Development (System Requirements and Development).

Request for suitability qualified and experienced service providers to develop software requirement specifications that will be used in the development and management of an online platform.

Date advertised	**09 October 2023**
Non-compulsory briefing session	**19 October 2023**
Closing date to submit quotation and proposals	**30 October 2023**

1. Background and Introduction

Established in 2010, GreenCape is a non-profit organisation that drives the widespread adoption of economically viable green economy solutions in South Africa. GreenCape works with businesses, investors, academia, and government to unlock the investment and employment potential of green technologies and services, and to support a transition to a resilient green economy. Our aim is to be globally relevant in driving the uptake of green economy infrastructure solutions in the developing world.

One of our current projects funded by the UK Pact (Partnering for Accelerated Climate Transitions), focuses on the development of a central online platform to address skills priorities in the renewable energy sector by creating a digital and effective communication hub between industry, Post School, and Education Training (PSET) institutions, and the Sector Education and Training Authorities (SETAs).

The value proposition of this platform lies in its ability to bridge the gap between industry and PSETs in terms of meeting industry's demand for graduate skills and aligning industry's competency needs with graduate skills outcomes. The online platform will also have the added benefit of empowering PSET institutions and individuals to align their skills and competencies with industry requirements. This strategic alignment will catalyse growth and innovation in the renewable energy sector.

GreenCape invites suitable service providers to assist in this project. The approach adopted is to follow the full circle of software development, that is, to develop Requirements Specification, the solution architecture, solution development, testing, go-live and support and maintenance.

GreenCape in consultation with stakeholders developed a preliminary business function with some conceptual data capturing screenshots that may be used as input into the development of System Requirements Specification.

The expected start date for this work is November 2023. Interested organisations are invited to submit quotations to undertake this work. Please note that the procurement process might require some in-person meetings with GreenCape either at their offices in Cape Town or at EWSETA offices in Johannesburg.

2. Scope of Work

Summary

- Development of System Requirements Specification and Solution Architecture.
- The service provider will need to engage with the GreenCape and the EWSETA to ensure that this specification is correct, and the correct operating environment post release is specified.
- System Requirements Specification is allocated a month with a further month allocated for solution architecture.

2.1 Overall required activities

1. Project envisioning and planning.
2. Define and document Systems Requirement Specifications document aligned with GreenCape Requirements.
3. Conduct several design meetings with GreenCape nominated staff members in order to reach a design that fulfils GreenCape requirements.
4. Develop the Solution Architecture.
5. Define Integration requirements with other system(s) (if any).

2.1.1 Overall MANDATORY REQUIREMENTS

Identified below are a number of requirements that must be addressed by the vendor's bid for the core system. These requirements are considered mandatory in implementing the complete automated system as defined in this RFP. Together, they define a system that will operate efficiently in the proposed computer environment while providing a high level of flexibility in meeting the current and future computing requirements.

a) Flexibility
- The new automated system must be designed with the recognition that the proposed system will have ever-changing requirements. As such, it needs to utilize a Relational Database Management System (RDBMS) to Perform state-of-the-art computing functions.
- Flexibility must be provided to meet external and internal management reporting requirements. This requirement can be met by providing user-controlled sequence, frequency, and content specification for production reports, and by either providing a modern report/retrieval system for ad hoc report requests or the availability of an end-user report/retrieval facility associated with the database product.
- The new automated system must be designed to minimize impact on the overall system arising from additions, changes, or deletions to the database. The system should permit changes in database structure without requiring recompilation of programs not directly impacted by the changes.

b) On-Line Processing Environment
- GreenCape intends to implement a distributed environment which provides the ability for users to take control and responsibility for their data. To accomplish this, the new system should provide end-users with the ability to enter data in an on-line interactive mode for key information and batch processing for other less important information with the ability for data processing begins at a scheduled time.

c) System Security

- The new system must provide system and application security controls to prevent unauthorized use of the system and the database, restrict access to the database, maintain database process controls, and logs all database transactions. In addition, the system should provide security to limit availability to application software screens, data elements, and the contents of data elements where appropriate.

- The security module should be designed to cater to the following aspects of security:
  - Authentication: User Interface tier and Middle tier
  - Authorization: The system should utilize a role-based security model, and each role should have a defined set of permissions
  - Application Level
  - Module Level
  - Functionality/Action Level
  - Data Level

- Auditing and Logging: an auditing module should be considered to provide the services required to log every action performed by the user on the system.
- Sensitive Configuration Data Settings: all sensitive configuration settings should be taken into consideration when designing the system.

d) Data/Systems Integration

- The new system must use an integrated database transcending functional area. It must operate from a single data element dictionary addressing the entire system, with common update and query capability.

e) Modularity

- The new automated system must be modular in design to accommodate a phased implementation. Once implemented, the system must be able to easily expand to include new functions without major impact on the system.

f) Process Controls

- The system should provide the following process controls:
  - Comprehensive edit controls which, for example, prevent incomplete or incorrect data from being processed.
  - Programmatic control of the process flow to prevent information from being processed in the wrong sequence.
  - Processing cycles completed in a logical, prescribed order.
  - Integrity of data entering the database, safeguarded through editing criteria.

g) System Documentation

Specific elements of documentation which must be available with the system include:

- ❖ System Requirements Specification
  - Business architecture (goals/objectives, key performance areas, business processes and information flow);
  - Data requirements (data required, relationship between/among data elements);
  - Processes / functions that need to be automated (decomposed to component level, use-cases);

- o USE CASES:

  (1) Uses Case Description,

  (2) System User,

  (3) External System,

  (4) Primary Activity,

  (5) Pre-conditions, and

  (6) Successful Post Condition:

    - ➤ Securing and protecting data elements and processes/functions Requirements.
    - ➤ Integration with other applications /system(s) Requirements.
    - ➤ Non-Functional Requirements
      - ▪ Inter-operability
      - ▪ Scalability
      - ▪ Performance

- o The communication and hosting including how storage will be protected and secured Requirements.

- ❖ Data Element Dictionary and ERD.
  - o Information Requirements (Data Requirements)

❖ Solution Architecture

- o Business architecture (goals/objectives, key performance areas, business processes and information flow).
- o Data architecture (data required, relationship between/among data elements);
- o Processes / functions that need to be automated (decomposed to component level).
- o Securing and protecting data elements and processes/functions.
- o Integration with other applications /system(s).
- o The infrastructure required to host and communicate for the proposed system/solution; and
- o The communication and hosting including how storage will be protected and secured.

On-line "HELP" Text Requirements

h) Operational Efficiency

Operational efficiency needs to be satisfied from both a technical and a functional viewpoint. Technical efficiencies can be achieved through modern development methodology and fourth generation programming techniques, and through. the utilization of a well-defined applications specific database management system. Functional efficiencies can be achieved by providing input capabilities directly into the system. Errors in input must be capable of being corrected.

I) RDBMS Technical Requirements

- (RDBMS) used to control the primary data storage for all software components. The vendor must recommend a RDBMS product or identify RDBMS products, which can be used in support of the vendor's software.
- **Multi-Tasking** - must permit simultaneous database access, permitting simultaneous access to files and queuing update requests at the record or field level when field contention prevents simultaneous updates. In addition, it must permit concurrent processing of batch and on-line jobs accessing the same data files and database.
- Independence - must be independent of terminal type or transaction type and be able to be accessed from any terminal in the network.
- **Logging, Restart, and Recovery** - must provide restart capabilities, as well as database access activity logging and blackout.
- **Performance and Activity Statistics** - must support performance monitoring tools and activity statistics reporting features. Statistics should be available on database access rates (both update and query) by program, terminal, and ID, and by time of day.
- **Administrative Tools -** should include a powerful set of administrative tools to monitor utilization, trace database access chains, optimize schema and sub-schema definitions, model, report areas/pages percent full, and to optimize file placement and layout.
- **Relational Database Characteristics -** should utilize the concept of user views whereby pseudo-schema are defined and stored for utilization by users without the users becoming involved in the actual schema and sub-schema structures of the database. The system should provide a security system to control utilization of user views by user ID, account, and activity.
- **Data Dictionary Facility -** The system should include an active integrated data dictionary. This dictionary should be an integral component of the data access capabilities, including the definition of both data attributes and values.
- **Data Import/backup Facility -** The system should include a data import facility which permits transferring data from other data files into the database.
- **End-User Query Facilities -** The system must have end-user query facilities which permit easy access to the information in the database.
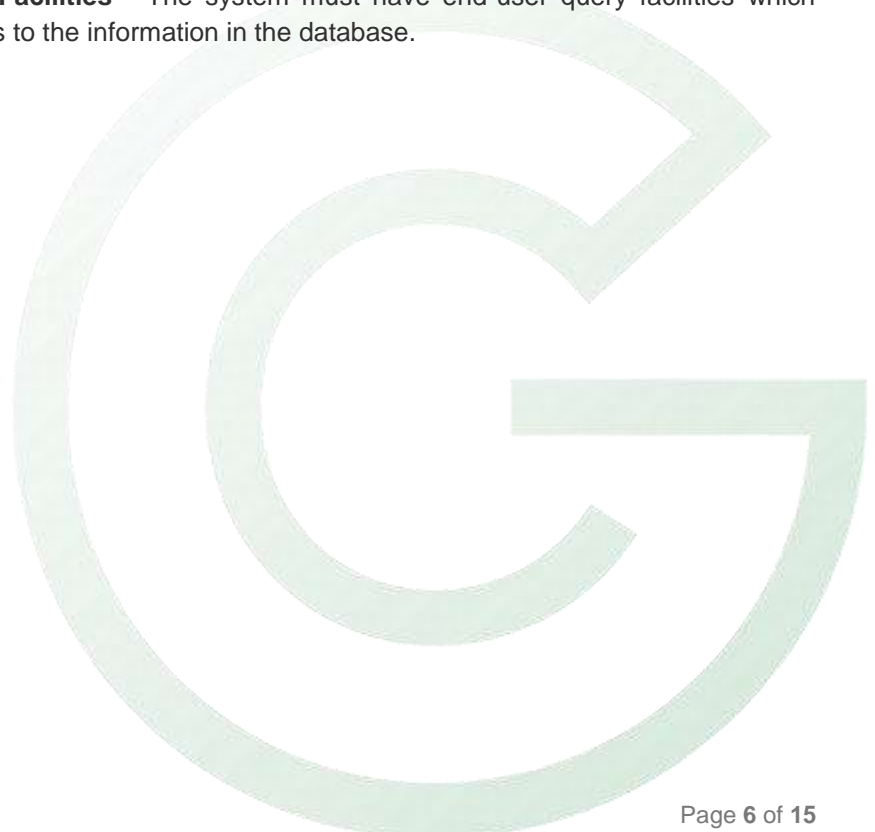
3. Deliverables

1. Project Management Documents-/ Project Charter.
2. System Requirement Specification Document (Functional and non-functional).
3. Software Design and Architecture n. (Conceptual, Logical and Detail design)
4. Database Dictionary and Entity Relation Diagrams (ERD).
5. Integration with users (User interface)
6. On-line Help

4. Date of Delivery

Note for each phase, the suggested date of delivery is maximum duration we envision the service provider to spend on each phase. Therefore, the full duration of this work can be modified to complete each phase.

Description	Maximum Time Allocation	Date of Delivery	Approval
a. Software specification requirements: 1.Project Management Documents-/ Project Charter. 2.System Requirement Specification Document (Functional and non-functional).	1 months	15 December 2023 November 2023	EWSETA approval
Review and approval by GreenCape			
b. Software Design and Architecture n. (Conceptual, Logical and Detail design) 4.Database Dictionary and Entity Relation Diagrams (ERD). 5.Integration with users (User interface) 6.On-line Help	1 month	30 January 2023	EWSETA approval
Review and approval by GreenCape			

5. General Information for bidders

a. Non-compulsory briefing session

There will be a non-compulsory briefing session held for interested bidders.

During the session the following will be provided:

- Overview of the project
- How the skill development platform relates to the broader project
- Details of the functional design
- Question and Answer (Q&A) around the RFQ

Meeting Invitation information (*please reach out to the samuel@green-cape.co.za should you wish to receive a meeting invitation*):

Date: 19 October 2023

Time: 09h30 – 11h00 (SAST)

Platform: Microsoft Teams Meeting

Meeting Link: Join the Meeting

b. Terms and Conditions of applications

1. Any quotation submitted after the closing date and time shall **not** be considered.
2. GreenCape reserves the right to **cancel** the procurement process without notice at any time and not make any appointment on this project.
3. The awarding of this project or any part thereof to a bidder will be communicated in writing by GreenCape.
4. Following notification, the appointed bidder will be expected to enter into a service level agreement and a non-disclosure agreement with GreenCape.
5. The successful quote submitted by the bidder will form part of the service level agreement and may not be amended at any time after acceptance unless agreed to in writing by GreenCape and the service provider.
6. The appointed bidder will be expected to comply, inter alia, with the following:
    - 9.1. any applicable health and safety rules and regulations, including, but not limited to, the provisions of the Occupational Health and Safety Act No. 85 of 1993.
    - 9.2. registration and good standing with the Commissioner for Compensation for Occupational Injuries and Diseases and having the necessary employer's liability insurance in respect of its employees/agents in line with the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993, as amended; and
    - 9.3. sufficient insurance to cover its liabilities in respect of the services to be provided (professional and public indemnity) and any other insurances that may specifically be required by GreenCape in relation to its appointment on this project.

c. Submission Requirements

- All quotations will be evaluated on the basis of a functionality/price/B-BEEE weighting of 50/30/20. B-BBEE points will be calculated as per the table set out in Annexure A to this RFQ.
- Each bidder must include in its quotation a confirmation that it does not and will not have any actual or potential conflict of interest in submitting its quotation (see Declaration of Interest Attached as Annexure B to this RFQ).
- Quotation for the work, broken down by activity.
- Functionality will be based on the criteria below:

	Summary of Technical Proposal Evaluation	Points Obtainable
1.	Expertise of Institute/Organization.	30
2.	Management Structure, Key Personnel, and Trainers related to this assignment.	20
3.	Proposed Methodology, Approach, and Implementation Plan.	50
Total		**100**

	Technical Proposal Evaluation	Points obtainable
1.1	Reliability and history of the organization's competence, reliability, financial, technical, and proof of sustainability	4
1.2	General Organisational Capability which is likely to affect implementation (i.e., consortium, holding company or one firm, size of the firm / organisation, strength of project management support e.g., project financing capacity and project management controls)	6
1.3	Extent to which any work would be subcontracted (subcontracting carries additional risks which may affect project implementation, but properly done it offers a chance to access specialized skills.	4
1.5	Relevance of: - Specialized Knowledge - Experience on Similar Programme / Projects - Experience on Projects - Work for major organisation	16
		30

	Management Structure, Key Personnel, and Trainers related to this assignment.	

	• The bidder should appoint a qualified project team and a manager who will be responsible for managing the project team, risks, schedules, budget, and conflicts:
	
	    o Also, the bidder is required to identify project key personal and provide their Resumes.
	
	    o Short description of experience on similar or related projects.
	
	    o The bidder and project team are required to have 5 – 7 years' proven experience. Where greater than 7 years is desirable.
	
	    o Knowledge of the energy and/or green economy environment
		5
		
		2
		
		10
		
		3

		20

	Proposed Methodology, Approach, and Implementation Plan.	Points Obtainable
2.1	To what degree does the bidder understands the task?	7
2.2	Have the important aspects of the task been addressed in sufficient detail?	4
2.3	Are the different components of the project adequately weighted relative to one another?	4
2.4	Is the conceptual framework adopted appropriate for the task?	7
2.5	Is the scope of task well defined and does it correspond to the TOR?	18

2.6	Is the work plan offered clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation to the project?
	
	• Bidder is to include in this proposal:
	    o A brief work plan that outlines the proposed approach and activities that would be taken to achieve the required scope of work. The work plan should include:
	        ▪ the proposed activities to achieve the required scope of work.
	        ▪ the timeframes for each activity.
	        ▪ a brief description of the proposed approach.
	        ▪ a risk register and mitigation plan that addresses any key project risks.
		10

		50

Bidders are required to submit the following documents as part of their submission:

1. Tax Clearance Certificate
2. Company Registration Certificate
3. Declaration of Interest (Annexure B)
4. BEE credentials with certificate or affidavit as relevant
5. Letter of good standing from the Compensation Fund in South Africa (COID)
6. Proof of required insurances
    a. Professional and/or Personal Indemnity Insurance
    b. Public Liability Insurance
    c. General Liability Insurance

Please email the above documentation to the UK PACT Project Manager, Samuel Pillay, samuel@green-cape.co.za by 17h00 on 30 October 2023, using the reference Demand Led Skills – Platform development. Please note that a failure to submit any of the required documentation could result in the bidder being excluded from the tender process.

For any queries and to receive a calendar invite to the non-compulsory briefing session related to this RFQ, please email: samuel@green-cape.co.za

Annexure A: B-BBEE score weighting

Table 1 – B-BBEE score weighting

B-BEEE Level Status of Contributor	Number of Points
1	20
2	18
3	16
4	12
5	8
6	6
7	4
8	2
Non-compliant	0

Annexure B: Declaration of Conflict of Interest

Any legal person/s having a relationship with persons employed by The GreenCape Sector Development Agency or any of the funders listed in this RFQ may make an offer/s in terms of this invitation to bid. In view of the possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to The GreenCape Sector Development Agency or any of the funders listed in this RFQ, it is required that the bidder or his/her authorized representative declare his/her interest as required below.

1.   Have you previously provided services/products to The GreenCape Sector Development Agency or any of the funders listed in this RFQ?

      YES   NO
      If yes, please furnish further particulars:

      _____

      _____

2.   Do you have any relationship (family, friend or otherwise) with employees of The GreenCape Sector Development Agency or any of the funders listed in this RFQ?

      YES   NO
      If yes, please furnish further particulars:

      _____

      _____

3.   Were you previously employed by the GreenCape Sector Development Agency or any of the funders listed in this RFQ?

      YES   NO
      If yes, please specify further details of previous employment:

      _____

      _____

4.   Please provide details of any other positions that you currently hold that could be of relevance to assessing conflict of interest for purposes of this project (e.g. directorships, partnerships, trusteeships, shareholdings, etc.):

      _____

      _____

I am aware that in the event of not accurately declaring any of the above, The GreenCape Sector Development Agency is entitled to terminate the agreement, and take any further action it deems necessary.

I hereby confirm that all the information provided above is true and correct.

SIGNATURE

DATE

FULL NAME

CAPACITY