

Consultancy services to plan, organise, and implement two	Project number/ cost centre:
Research, Innovation and Capacity Building Stakeholders in the	
Green Hydrogen Economy.	

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0. List of abbreviations

AVB/GTCC	General Terms and Conditions of Contract for supplying services and work 2022
BMZ	German Federal Ministry for Economic Cooperation and Development
DC	Development Cooperation
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GH2	Green Hydrogen
GHSA	Green Hydrogen South Africa
H2.SA	Promoting a Green Hydrogen Economy in South Africa
IC	International Cooperation
PtX	Power-to-X
ToR	Terms of reference
IIO	Investment and Infrastructure Office
NDP	National Development Plan
DSI	Department of Science and Innovation
NRDS	National Research and Development Strategy
PtX	Power-to-X
RE	Renewable Energy
STI	Science, Technology, and Innovation
ToRs	Terms of reference
TYIP	Ten-year Innovation Plan
WS	Workstream
RDI	Research, Development and Innovation
HSRM	Hydrogen Society Roadmap
GHCS	Green Hydrogen Commercialisation Strategy



1. Context

Over the past 20 years, there were several plans and strategies (e.g., the 2002 NRDS, 2008 TYIP, the NDP and recently the 2019 White Paper on STI) that were adopted by South Africa to promote science, technology, and innovation as drivers and interventions for sustainable and inclusive growth and development¹. This sequence of plans and strategies highlighted recurring themes such as the poor networking within the region and in the global context, a lack of competitiveness within the global environment, and a fragmented and inadequately coordinated science system as causes for systemic failures of innovation in South Africa. In 2008, the South African Cabinet approved the HySA Strategy² as a driver towards the development of a green hydrogen economy, reduction of emissions and securing the country's energy future.

Building on the successful implementation of the HySA Strategy and strong foundation of the Hydrogen Society Roadmap (HSRM) for South Africa³ the South African Green Hydrogen Commercialisation Strategy (GHCS)⁴ and Action plan were approved in March 2020. The GHCS recognises a need to "support commercialisation of innovative products, processes and services" and "develop local industrial capability to produce fuel cells, electrolyser, ammonia cracking, put in place international partnerships with key countries willing to purchase GH2, etc." as some of the necessary actions for successful commercialisation of green hydrogen and developing South Africa's competitive advantage.

It is within this context of the drivers for innovation laid by the various strategy recommendations highlighted above (e.g., *"Improve global innovation competitiveness and increase innovation capacity through collaborative R&D* and *"Put in place international partnerships with key countries willing to purchase GH2"*) that this activity is launched. The lessons learned, experiences and recommendations from the project will be shared with key players from each of the countries to foster research collaboration and contribute to successful implementation of their respective HSRMs.

Brief information on the project

The service provider should organise and implement two study tours: One from South Africa to Germany and the second from South Africa to an African country similarly engaged in the development of a green hydrogen economy.

The specific objectives to be attained through the study tours are:

- i. To strengthen the capacities of the participating organisations and relevant key stakeholders to effectively fulfil their mandates with respect to research, innovation and capacity building in the green hydrogen economy in South Africa.
- ii. To establish and strengthen knowledge exchange partnerships between South Africa, Germany/EU and a selected African country in green hydrogen RDI policies, and investments for mutual benefits of the partners countries.

The H2.SA Project

H2.SA is a project of the German Development Cooperation with South Africa. It is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (*GIZ*) *GmbH* in close cooperation with The Presidency of South Africa. H2.SA's main objective is to promote a South African green and sustainable hydrogen economy. Working closely with



its partners from Government, private sector, and civil society, H2.SA provides expertise, resources, and builds capacity for a secure and sustainable energy future that holds opportunities for all South Africans.

Within this framework, the H2.SA project collaborates with the Investment Infrastructure Office (IIO) of the SA Presidency as the political partner, as well as other energy and climate sector partners in SA's public and private sectors. Briefly, the H2.SA project consists of four thematic areas (also called Workstreams, WS) as follows:

- WS 1: Strategy Development and Regulatory Framework
- WS 2: Private Sector Engagement and Support
- WS 3: Training, Research, and Innovation
- WS 4: Sustainability Impact and Just Transition

The services elaborated in this ToR are designed to contribute to the H2.SA workstream 3 "Research, Innovation, and Capacity Building", which has the objective of "Enhancing capacity and knowledge of South African stakeholders in the green hydrogen and power-to-X sector (GH2/PtX)".

2. Tasks to be performed by the contractor

The contractor is responsible for providing the following services:

To develop and implement two study tours between January 2024 – September 2025 for RDI stakeholders from the public and private sectors in the green hydrogen economy in South Africa. One study tour should be to Germany and the second study tour to an African country also engaged in green hydrogen activities, for example Namibia, Mauritania, Nigeria, or Kenya. Note that Morocco is not an option due to previous exchange activities.

1) Task 1: Preparatory Activities

- Submit a draft inception report at least seven (7) days prior to the kick-off meeting. The draft report should outline the following:
 - a) Information dissemination methodology: how will South African stakeholders be informed about the study tours;
 - b) Participant selection methodology: how will participants be selected, selection criteria, selection process, requirements for participation.
 - c) Proposal and motivation for an African country to be included in the study tour programme.
 - d) Identify important green hydrogen events taking place in Europe and Africa which could be included in the tour programme.
 - e) First proposed outline for study tour to Germany.
- Prepare for kick-off meeting to present the inception report to GIZ for approval.
- Revise the inception report to include recommendations from the kick-off meeting including milestones and timelines.

Deliverable 1: Final inception report (with approved workplan and agreed milestones)



- 2) Task 2: Identification of relevant research, development, and innovation stakeholders.
 - Conduct desk-top research to identify the government departments/officials, business leaders, academics, and civil society members to participate in the planned study tours.
 - Selection of South African participants in cooperation with GIZ.
 - Identification of the priority tour sites including details of the programme and topics to be covered.
 - Submission of draft tour outline (Programme), including important conferences or events
 - Presentation and submission of a report to GIZ.

Deliverable 2: Report containing a list of participants and tour programmes.

3) Task 3: Preparation and Implementation of the Study Tours:

- Prepare study tour materials, documentation, guidelines, etc. for handing over to participants, including basic information regarding institutions and pilot projects to visit as well as RDI policies and strategies of the host countries.
- Support logistical arrangements of the study tour including drafting invitation letters, communication with participants and host organizations and coordinating with GIZ's logistical support team.
- Support GIZ's logistical team with arrangement of participants' flight bookings, transport, and accommodation. It should be noted that GIZ will cover all costs related to participant expenses.
- Preparation and submission of assessment forms from participants for each study tour.
- Participation in de-briefing meetings with GIZ after each study tour to formulate lessons learned and areas for improvement.

Deliverable 3: Two reports, one after the successful implementation of each study tour.

4) Task 4: Submission of Final Report

- Preparation of the final tour report including lessons learned, pictures, analysis of assessment forms, testimonials, and recommendations from the consultant.
- Presentation of the study tour report to GIZ H2.SA team.

Deliverable 4: Final report for each study tour.

Certain milestones, as laid out in the table below, are to be achieved during the contract term:

Milestones/process steps/partial services	Deadline/place/person responsible
Final inception report (with approved workplan and agreed milestones)	2 weeks after signing of the contract
A list of potential South African participants, priority tour sites and details of the first study tour.	



Arrangement of the first tour including logistics plan and tour schedule.	15 August 2024
Draft report of the first study tour.	30 October 2024
Arrangement of the second study tour.	15 July 2025
Submission of consolidated report for the two tours and project closure.	15 October 2025

Period of assignment: from 01 February 2024 until 15 October 2025.

3. Concept

In the tender, the tenderer is required to show *how* the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the tenderer must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.

Technical-methodological concept

Strategy (1.1): The tenderer is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the tenderer presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The tenderer is required to present the actors relevant for the services for which it is responsible and describe the **cooperation (1.2)** with them.

The tenderer is required to present and explain its approach to **steering** the measures with the project partners (1.3.1) and its contribution to the **results-based monitoring system** (1.3.2).

The tenderer is required to describe the key **processes** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the tenderer is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed) (1.4.2).

The tenderer is required to describe its contribution to knowledge management for the partner (1.5.1) under **learning and innovation**.

Project management of the contractor (1.6)

The tenderer is required to explain its approach for coordination with the GIZ project (1.6.1). In particular, the project management requirements specified in Chapter 2 (Tasks to be performed by the contractor) must be explained in detail.

The tenderer is required to draw up a **personnel assignment plan** (1.6.2) with explanatory notes that lists all the experts proposed in the tender; the plan includes information on assignment dates (duration and expert months) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.



4. Personnel concept

The tenderer is required to provide personnel who are suited to filling the positions described, on the basis of their CVs (see Chapter 7), the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points in the technical assessment.

Team leader

Tasks of the team leader

- Overall project management, administration, implementation, and logistics arrangements for the study tours.
- Regular reporting to GIZ in accordance with deadlines.
- Overall responsibility for the advisory packages of the contractor (quality and deadlines)
- Coordinating and ensuring communication with GIZ, partners and others involved in the project

Qualifications of the team leader

- Education/training (2.1.1): university degree (Master's) in Engineering OR Physical Science
- Language (2.1.2): C1-level language proficiency in English
- General professional experience (2.1.3): 10 years of professional experience in the South African green energy sector
- Specific professional experience (2.1.4): 3 years in the South African RDI sector pertaining to hydrogen OR renewable energy
- Leadership/management experience (2.1.5): 4 years of leadership experience as project team leader or manager in a company
- Regional experience (2.1.6): 10 years of experience in international projects including Southern Africa and Germany (region), of which 5 years must be in South Africa (country)
- Development cooperation (DC) experience (2.1.7): not applicable
- Other (2.1.8): proven experience with the arrangement of study tours for South African decision-makers.

Key expert 1 (Photographer)

Tasks of key expert 1

- Provide photography services during the study tours.
- Post-production of photographs taken during the study tours.
 - Provide at least 250 high-quality photographs of each study tour in digital format (e.g. jpeg, tiff or raw format).
 - The resolution should be in the range of 20 megapixel in order suitable for use in printed material.
 - The photographer must provide different visual perspectives (close-ups, medium range, long distance), in both horizontal and vertical formats.



- Transfer all rights to the photographs taken during the study tours to GIZ. Note that GIZ requires all rights to the pictures to be reproduced in current and future publications, both by GIZ and other institutions to which GIZ might provide photos.

Qualifications of key expert 1

- Education/training (2.2.1): university qualification (National diploma) in Photography
- Language (2.2.2): C1 -level language proficiency in English
- General professional experience (2.2.3): 3 years of professional photography experience.
- Specific professional experience (2.2.4): Demonstratable experience in photographing energy or renewable energy installations
- Leadership/management experience (2.2.5): not applicable
- Regional experience (2.2.6): 3 years of experience in South Africa
- Development Cooperation (DC) experience (2.2.7): not applicable
- Other (2.2.8): not applicable

Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Socio-cultural skills
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

The tenderer must provide a clear overview of all proposed short-term experts and their individual qualifications.

5. Costing requirements

Assignment of personnel and travel expenses

Accommodation costs which exceed the allowance up to a reasonable amount and the cost of flights and other main forms of transport can be reimbursed against evidence.

All business travel must be agreed in advance by the officer responsible for the project.

Sustainability aspects for travel

GIZ would like to reduce greenhouse gas emissions (CO_2 emissions) caused by travel. When preparing your tender, please incorporate options for reducing emissions, such as selecting the lowest-emission booking class (economy) and using means of transport, airlines and flight routes with a higher CO_2 efficiency. For short distances, travel by train (second class) or emobility should be the preferred option.



If they cannot be avoided, CO_2 emissions caused by air travel should be offset. GIZ specifies a budget for this, through which the carbon offsets can be settled against evidence.

There are many different providers in the market for emissions certificates, and they have different climate impact ambitions. The <u>Development and Climate Alliance (German only)</u> has published a <u>list of standards (German only)</u>. GIZ recommends using the standards specified there.

Specification of inputs

Fee days	Number of experts	Number of days per expert	Total	Comments
Team Leader	1	37	37	 10 days per study tour preparation (20 days on total) 6 days per study tour (12 days in total) 5 days reporting.
Key Expert 1: Photographer	1	18	18	 6 days per study tour (12 days in total) 3 days per study tour for post-production (6 days in total).
Travel expenses	Quantity	Price	Total	Comments
Per-diem allowance in country of assignment	32			The allowance is for both the team leader and key expert 1, allowing for:
GermanyAfrican country TBC				 2 study tours of 6 days each (24 days in total) 2 travel days per trip (8 in total).
Overnight allowance in country of assignment	24			The allowance is for both the team leader and key expert 1, allowing for:
GermanyAfrican country TBC				• 2 study tours of 6 night each (24 nights in total)
Transport	Quantity	Price	Total	Comments
International flights Economy class return air tickets to: • Germany • African country TBC	4			Travel to the place of service delivery: Germany and African Country TBC.
Domestic flights	0			Flights within the country of assignment during service delivery



CO ₂ compensation for air travel Link to working aid and table for determining the budget and Guidance for GIZ service providers on avoiding, reducing and offsetting GHG emissions on setting the budget.	4			A budget is earmarked for settling carbon offsets against evidence.
 Travel expenses (train, car) Mileage at R3,60 per km E-hailing/shuttle services / Gautrain / train / bus / Airport transfers 	12			Travel within the country of assignment, transfer to/from airport etc.
Other travel expenses Visa costs 	4			
Other costs	Number	Price	Total	Comments
Other costs Flexible remuneration	Number 1	Price R50,000.00	Total R50,000.00	CommentsA budget of EUR 2,473.00 is foreseen for flexible remuneration. Please incorporate this budget into the price schedule.Use of the flexible remuneration item requires prior written approval from GIZ.

6. Inputs of GIZ or other actors

None.

7. Requirements on the format of the tender

The structure of the tender must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Chapter 3) should be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). The tender must be legible (font size 11 or larger) and clearly formulated. It must be drawn up in English (language).

The complete tender must not exceed 10 pages (excluding CVs). If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment. External content (e.g. links to websites) will also not be considered.



The CVs of the personnel proposed in accordance with Chapter 4 of the ToRs must be submitted using the format specified in the terms and conditions for application. The CVs shall not exceed 4 pages each. They must clearly show the position and job the proposed person held in the reference project and for how long. The CVs can also be submitted in English (language).

Please calculate your financial tender based exactly on the parameters specified in Chapter 5 Quantitative requirements. The contractor is not contractually entitled to use up the days, trips, workshops or budgets in full. The number of days, trips and workshops and the budgets will be contractually agreed as maximum limits. The specifications for pricing are defined in the price schedule.

8. Option

Not applicable.

9. Outsourced processing of personal data

The performance of the contract may be associated with the processing of personal data by the contractor, who would alone define the nature of such data and how such processing would be carried out. In such cases, the contractor shall act as an independent DATA CONTROLLER and must alone comply with ALL applicable data protection obligations, including regional and local laws, in particular the Art. 44-50 GDPR. The contractor must process personal data only when a given goal cannot be reasonably attained without such data. The data protection principles such as lawfulness, data minimization, accuracy, purpose limitation, storage limitation, transparency, integrity and confidentiality, and accountability, as well as the numerous rights of the data subject must be paid due attention. The GDPR's data transfer rules must be considered whenever personal data leaves the EU for a third country. The GIZ is NOT in any way responsible for such processing.

Where the contractor is not subject to the GDPR and the applicable laws do not contain any explanation on the data protection principles and rights mentioned here, the definitions and meanings provided by the GDPR (Regulation (EU) 2016/679) could be helpful. The GIZ is available to support the contractor whenever need arises.

Assessments, reports, surveys, or any other data and information shared with GIZ must be provided strictly anonymously, meaning that any information relating to an identified or identifiable natural person ('data subject') must be excluded. Specifically, data relating to e.g., gender, age, health, religion, or ethnicity must be provided in an aggregated manner.



10. Annexes

- 1) GIZ H2.SA Fact sheet
- White Paper on Science, Technology, and Innovation, 2019 (<u>dst.gov.za/images/2019/White paper web copyv1.pdf</u>).
- Hydrogen South Africa Energy Research, Development, and Innovation Strategy, 2008 (<u>HFCT Strategy (hysa-padep.co.za</u>)).
- 4) The Hydrogen Society Roadmap (HSRM) for South Africa (dst.gov.za/images/South African Hydrogen Society RoadmapV1.pdf).
- 5) South Africa Green Hydrogen Commercialisation StrategyPowerPoint Presentation (<u>Full-Report-Green-Hydrogen-Commercialisation-Strategy-30Nov22_Public_Ver1-</u> <u>1.pdf (idc.co.za)</u>).

11. Other Requirements

- Please submit your proposal (technical and price proposal) in separate files/folder to ZA_Quotation@giz.de no later than **08th December 2023** all documents must be in PDF.
- Submission to any other email address may invalidate your bid.
- Please do not mention any price for this measure on your cover letter/Technical proposal.
- Please submit your tax clearance certificate with the bidding documents.
- Please submit your price proposal in **ZAR**.
- Our General Terms of Conditions (attached) shall not be changed/amended should you be the winner of this tender. These General Terms and Conditions will form part of the contract should you be awarded this contract. By submitting your proposal, we will conclude that you have read and accepted these terms and conditions.
- Participating more than once in same tender is not allowed and it will lead to your proposal as well as that of the company where you appear more than once being disqualified. The responsibility rests with the companies to ensure that their partners/experts are not bidding/participating more than once in same tender.
- Bidders are not allowed to communicate directly with any other person regarding this bid other than the procurement official/s. Failure to comply with this requirement may lead to your bid being disqualified.
- Bidders must strictly avoid conflicts with other assignments or their own interests. Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this EOI and tender process, if they:

a) are or have been associated in the past, with a firm or any of its affiliates which have been engaged by GIZ or the Interim Supply Chain Management



Council to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation, and other documents to be used for the procurement of the services in this selection process;

b) were involved in the preparation and/or design of the programme/project related to the services requested under this EOI and tender;

c) are serving or have been serving in the past three months in the structures of the Interim Supply Chain Management; or

d) are found to be in conflict for any other reason, as may be established by, or at the discretion of GIZ.

Scientific data

In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to GIZ, and seek GIZ's confirmation on whether or not such a conflict exists.

• Similarly, the Bidders must disclose in their proposal their knowledge of the following:

- a) if the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel are family members of GIZ staff involved in the procurement functions and/or the Interim SCM Council or any Implementing partner receiving services under this EOI or tender; and
- b) all other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices.
- Failure to disclose such an information may result in the rejection of the proposal or proposals affected by the non-disclosure.

Bids sent via Dropbox and WeTransfer will not be accepted