



**EXPRESSION OF INTEREST (EOI) FOR THE DESIGN & DEVELOPMENT OF
SMART CLASSROOM SOLUTIONS FOR KENGEN GEOTHERMAL TRAINING
CENTRE - (GTC).**

TENDER REFERENCE: KGN-GDD-086-2024

(Open International)

I. Background

KenGen-Geothermal Training Centre (GTC) was selected as one of the Regional Technical Vocational Education and Training (TVET) Centres of Excellences (CoEs) to be supported under the East Africa Skills for Transformation and Regional Integration Project (EASTRIP) project. The EASTRIP project is a special skills development project and an initiative of the Ministry of Education and the World Bank. KenGen GTC is one (1) of the five (5) Regional Flagship TVET Institutes (RFTI's) selected in Kenya to develop demand driven skills for the Energy sector, under the East Africa Skills for Transformation and Regional Integration Project (EASTRIP). The Project is an initiative of the Ministry of Education and World Bank (WB) supporting 16 RFTI's in the East Africa region (Kenya (5), Ethiopia (7) and Tanzania (4)).

Through EASTRIP, KenGen-GTC was granted financial support to implement key project activities that includes; upgrading of training infrastructure and equipment, enhancement of governance & management of the Centre, institutionalizing of linkages with academic institutions/industry and the development of a Competency Based Curriculum (CBA) to address skills gaps in the energy sector. The project aims to increase access, improve the quality of TVET programs and support regional integration. The EASTRIP project targets the development of skills in five (5) thematic areas of energy, transport, ICT, agriculture and light manufacturing (textiles and leather).

KenGen- GTC has developed a Curriculum, a key project activity under implementation the EASTRIP project. Under the guidance of the Technical Vocational Education and Training-Curriculum Development, Assessment and Certification Council (TVET-CDACC), the Centre has developed Diploma Courses under the first phase as listed below:

- 1) Power plant Operations and Maintenance
- 2) Geological Technology
- 3) Geochemistry Technology
- 4) Geophysical Technology
- 5) Steam field Monitoring Technology
- 6) Reservoir Monitoring Technology
- 7) Energy Project Management
- 8) Drilling Operations

To facilitate effective training and knowledge acquisition at GTC, KenGen wishes to procure consultancy services to enable the Design & Development of Smart Classroom Solutions for KenGen Geothermal Training Centre. The firms that shall be short-listed as a result of this EOI will be invited to participate in the subsequent Request **for Proposal (RFP)** process thereafter.

2. Objective

To facilitate the full, operationalize of KenGen-Geothermal Training Centre (GTC) and to enable effective training and knowledge acquisition at GTC, KenGen will augment physical training with smart classroom solutions for the following course:

- 1) Power plant Operations and Maintenance
- 2) Geological Technology
- 3) Geochemistry Technology
- 4) Geophysical Technology
- 5) Steam field Monitoring Technology
- 6) Reservoir Monitoring Technology
- 7) Energy Project Management
- 8) Drilling Operations

Consequently, the company wishes to engage a qualified and knowledgeable consulting firm/s to undertake the Design & Development of Smart Classroom Solutions for KenGen Geothermal Training Centre as laid down under **Annex I- GTC Courses**, appended here-in.

The firm/consortium shall:

- I. Design and Develop Smart classroom infrastructure
- II. Identify and model the requisite Training equipment
- III. identify and acquire the requisite IT equipment
- IV. develop Smart classroom Software for the different courses
- V. carry out Installation, training and commissioning for all the Smart classroom requirements
- VI. Undertake the Training of trainers on Smart classrooms and smart classroom managers
- VII. Offer the required Technical support for the developed smart classroom solutions
- VIII. offer After sales service for the developed smart classroom solutions

Improvement of terms of reference:

The prospective consultancy firm may offer suggestions and improvements on the terms of reference which they consider would improve the quality of this assignment. Such suggestions if accepted and approved will form part of the terms of reference as will be laid out in the RFP document.

3. Eligibility Criteria

The expression of interest must be accompanied by the firm's qualifications, professional capabilities, and details of prior experience related to the Design & Development Of Smart Classroom Solutions

Such information shall include company profiles, proof of experience on the design and development of smart classroom solution, description and demonstration of availability of

appropriate skills among staff with their most recent profiles showing their experience, qualifications, capabilities, and referees in relation to smart classroom design and development.

The eligible firms shall:

- i) Demonstrate that they have undertaken at least three (3) three projects on the design and development of smart classroom solution in the last five (5) years in TVET sector.
- ii) Provide clients' letters of recommendation of the projects undertaken. Details of the clients including name, telephone number and email address.
- iii) Provide details of suitable and qualified personnel who will be utilized to design and develop the smart classroom solution
- iv) Demonstrate financial capability and lender credibility for the last 3 years.

4. Documents to be submitted.

- a) Provide the requirements below;

- Name of firm
- Postal address
- Physical address
- Telephone number
- Email Address
- Contact person

- b) Certified copies of Memorandum/Articles of Association for all consortium members
- c) Documents detailing that the consulting firm fulfils the minimum requirements as stipulated above.
- d) Certificate of incorporation or equivalent from country of domicile.
- e) Complete set of duly audited, signed and approved financial statements for the last 3 years.
- f) Tax compliance certificates or equivalent documents applicable in the bidder's Country of origin.
- g) List of relevant projects undertaken, including a brief description, value, and the status of each of the projects.
- h) Letters of recommendation from clients.
- i) Where the Applicant is a consortium, a list of the proposed members of the consortium and the proposed Leader of the consortium. (Attach consortium agreement)
- j) All the members of the consortium must meet the EOI requirements
- k) Information regarding any current litigation involving the consulting firm certified by a reputable law firm.

5. Due Diligence

KenGen may carry out due diligence for the successful shortlisted consulting firms. Interested firms shall provide express consent to visit their premises for this purpose.

6. Clarifications

The interested parties may request for clarifications on this expression of interest up to ten (10) days before the EOI submission date.

Any request for clarification must be sent in writing by paper mail or electronic mail to:

**General Manager-Supply Chain,
Kenya Electricity Generating Company Plc,
9th Floor, KenGen Pension Plaza II,
Stima Plaza II, Kolobot Road, Parklands,
P.O. Box 47936 – 00100, Nairobi, Kenya.
Tel: +254-20-3666427
Fax: +254-20-2248848
Email: tenders@kengen.co.ke CC: pmangi@kengen.co.ke**

7. Pre-Bid conference and Mandatory Site Visit

There shall be a **Pre-bid Conference and Mandatory site visit and pre-bid conference on 17th December 2024** at **KenGen Geothermal Training Centre in Olkaria** starting at **1000hrs to 1400hrs EAT**

8. Submission of the EOI

The EOI (1 original, 1 Copy and a soft copy in a flash disk) should be submitted in a sealed envelope by **1400 hours (East African Time) on 9th January 2025** to the following address:

**General Manager - Supply Chain,
Kenya Electricity Generating Company Plc,
9th Floor, KenGen Pension Plaza II,
Kolobot Road, Parklands,
P.O. Box 47936 - 00100, Nairobi, Kenya.**

Information on the outer envelope should also include:

Confidential, Expression of interest (EOI) for the Design & Development of Smart Classroom Solutions for KenGen Geothermal Training Centre - (GTC): Do Not open before, 9th January 2025 at 1400hrs East African Time.

The bid document shall be dropped in the tender box located on the ground floor of **KenGen Pension Plaza II Building**.

The opening will take place thereafter in the presence of bidder's representative (s) who choose to attend at Pension Plaza Phase II ground floor or alternative venue as will be communicated by the procuring entity.

GENERAL MANAGER, SUPPLY CHAIN

ANNEX I – GTC COURSES

NO.	DISCIPLINE	REQUIRED SMART CLASSROOM SIMULATION SOLUTIONS/VIRTUAL REALITY/ ARTIFICIAL INTELLIGENCE
1.	GEOCHEMISTRY	<ol style="list-style-type: none"> 1) Exploration of coal, geothermal, oil& gas, nuclear resources 2) Monitoring of coal, geothermal, oil& gas, nuclear resources, Power Plant Chemistry 3) Chemical Analysis of Geochemical Samples
2.	GEOLOGY	<ol style="list-style-type: none"> 1) Geological Field Mapping 2) Geological Well Logging 3) Geological Sample Analysis 4) Geotechnical Survey 5) Geological Data Management
3.	GEOPHYSICS	<ol style="list-style-type: none"> 1) Geophysical resistivity, potential field and seismic survey 2) Determination of resource reservoirs 3) Geophysical well logging 4) Geophysical Geotechnical survey 5) Geophysical environmental assessment
4.	RESERVOIR	<ol style="list-style-type: none"> 1) Determination of geothermal, groundwater, oil, gas, and coal reservoir 2) solar energy systems
5.	STEAM SYSTEMS	<ol style="list-style-type: none"> 1) Steam systems operations, mechanical infrastructure, 2) Instrumentation and control systems 3) Power and telecommunication systems 4) Non-destructive testing 5) Design and construction of pipe system
6.	PROJECT MANAGEMENT	<ol style="list-style-type: none"> 1) Energy Project Feasibility determination 2) Energy Project Development modelling 3) Energy Project financing options 4) Energy Project Procurement 5) Energy Project Execution 6) Energy Project Performance, monitoring & evaluation
7.	POWER PLANT O&M	<ol style="list-style-type: none"> 1) Material Handling systems 2) Plant Pumping System 3) Fire Detection and Suppression System 4) Plant Heating Ventilation and Air Conditioning (HVAC) System 5) Compressed Air System 6) Turbine Generator System 7) Plant Transmission System 8) Electrical Switch Gear and Protection System