

*Call for Proposals*

## **POSSIBILITIES FOR HYDROGEN ECONOMY IN SUB-SAHARAN AFRICAN COUNTRIES**

2019

### **1. Background and justification**

Africa is indexed nowadays, as the continent where the level of development is still weak. This situation, among others, is directly related to the low rate of access to energy on the continent. The International Energy Agency compares the electrification rate of Africa with other continents. Apart from Northern and South Africa, which now appear as the "Power House", Africa is today the continent which is the least supplied with electric power. Around 57 % of the population are without access to energy.

As a consequence, most African countries developed energy policies and strategies focused on renewable energies. These renewable energies generally concern solar, wind, biomass, geothermal or hydraulics. However, energy production via non-renewable resources such as coal and oil remains the major source of energy exploited on the continent.

### **2. Overall objective of the study**

The overall aim of this study is the assessment of reports, existing studies, initiatives and regulations on hydrogen economy advantages/issues in Sub-Saharan African countries. The study should clearly set out its findings, and evidence-based conclusions. A strong focus will be on recommendations on how to raise awareness and improve the integration of hydrogen technology in securing energy access in Sub-Saharan Africa.

As a guideline, the following questions should be answered:

- Relevance of the possibilities for hydrogen in Sub-Saharan Africa
- Focus of hydrogen development in Sub-Saharan Africa and related articles (micro/macro context, political relevance, connection to other questions, etc.)
- Obstacles for hydrogen economy integration in country energy infrastructures
- Framing of good examples (policy, technology development, etc.)

The authors should consider previous research on the topic and statistical data already available.

### **3. Expected outcomes**

- Assessment of the quality of articles in selected (based on a sampling method) countries in Sub-Saharan Africa and in a given time.
- Assessment of knowledge, prototype and experience of countries that are writing on hydrogen technology/economy and related topics.
- Assessment of obstacles to a scientifically astute insights development on the possibilities for hydrogen in Sub-Saharan African countries and related topics.
- Recommendations on how hydrogen economy can be implemented/improved in the region.
- Identification on the needs of practitioners and non-academia to help the implementation of such technology.

### **4. Methodology**

The study should follow methods approach that draws on both existing and new quantitative and qualitative data to answer the given questions. Methodological elements

will jointly provide the data and insights required to answer the review questions and will include literature review, and stakeholder interviews.

The result should be a final study that gives answers to the questions addressed in these Terms of Reference. The methodology will be specified in the outlined working plan by the authors. It is expected that the authors will propose further approaches to ensure accuracy and rigour. A detailed methodology and data collection methods should be included in the author's proposal. This could include: Face-to-face interviews with respondents (ministries, policy-makers, etc.), analysis of existing reports and research, including an exhaustive list of reports available online.

## 5. Recipients

- Stakeholders
- Ministries of energy
- Scientists, academicians
- Policy-Makers
- Practitioners
- Broader population

## 6. Expected deliverables

The study will require inputs throughout the programme, i.e. from October 2019 up to two months after its completion. The proposal's financial plan should detail how each deliverable is linked to payment. The expected deliverables include:

### Inception deliverables

A) *Work Plan* Draft. This period will allow the authors to familiarise themselves with the subject and develop a work plan. The work plan should include first findings from literature review and should also clarify eventual questions from these Terms of Reference. Furthermore, the work plan will include:

- Detailed outline of methodology,
- Time table for completion of deliverables,
- Detailed timeline with deliverables
- Detailed financial outline,
- Key informant and document overview.

B) Finalised Workplan

C) Final Study (date tbc.). The authors are expected to produce **one** assessment of the questions addressed in these ToRs. The format of the final study will be determined through consultation with KAS, but it is assumed it will be a plausible and whenever possible, rigorous assessment of data and its conclusions. The report should be written clearly to a standard suitable for publication. It should include an executive summary of up to 15 pages and be no more than 50 pages in length (Windows Arial font 11) (excluding annexes). The structure of the report should reflect order and clustering of the questions specified in the ToRs. Methodology should be set out clearly, as should analysis, findings, lessons and recommendations.

### For this key deliverable:

- The authors will update KAS frequently on the process of compiling the study (at least once a month, via email or phone or in person).
- The authors will be asked to revise the report to take into consideration questions and feedback from KAS after presentation of the draft report.

- A full and complete draft is required to be handed over to KAS before the final version is due.

#### Further deliverables

- *Presentation of the study*: The authors will present their findings in a suitable way and will, if necessary, travel to countries within Sub-Saharan Africa. For these presentations, KAS will cover travel and accommodation but no further consultation fees will be paid.
- The results should be resumed in approximately 2 policy briefs, directed to the targeted audiences mentioned before. Each brief should not be longer than three pages. No additional fees will be paid for these briefs.

## **7. Budget and project outline**

The budget should show:

The daily cost rate of the consultancy team, broken down into the following activities:

- 7.1.1. Project management and report writing
- 7.1.2. Desk research
- 7.1.3. Stakeholder interviews
- 7.1.4. Other cost items

Provide detailed budget for this project (should be in local currency and euros). You can use the following link to convert: <http://www.oanda.com/currency/converter>.

## **8. Call for expression of interest/proposal submission**

The consultants or consultancy firms interested in this assignment are expected to submit proposals (both technical and financial) with CVs of the proposed team. The technical proposal should include a list of all consultant involved.

The financial proposal must be submitted with an itemised breakdown of professional fees and estimated expenses for the activities. Costs for travel and accommodation for the regional workshop are not part of the offer and will be paid by KAS directly. However, the estimated cost for this activities should be included as well.

The financial proposal should be in local currency and euros.

Please send your expression of interest to: [anja.casper-berretta@kas.de](mailto:anja.casper-berretta@kas.de)

Deadline for applications: 25 October 2019