R2CF VALCEA

IMPLEMENTATION SUPPORT FOR GREEN ENERGY COMPONENT

TERMS OF REFERENCE

1. BACKGROUND

In October 2012, the European Bank for Reconstruction and Development (the “EBRD” or the “Bank”) signed the R2CF Valcea Water Project (“the Project”) with SC Apavil SA Ramnicu Valcea (the “Company”). The loan of EUR 13.85 million to the Company is co-financed through an EU approved investment programme of EUR 104.25 million designed to improve water and wastewater services in the County in line with relevant EU directives and result in significantly reduced water losses, optimised operating costs and expanded water supply and wastewater collection and treatment services. The loan comprises a tranche of up to EUR 8.55 million from the Bank’s own account, and a tranche of up to EUR 5.30 million funded by the Green Energy Special Fund (“GESF”) administered by the Bank.

The key objective of this Project is to develop a sustainable water and wastewater system in the county of Valcea by improving the quality of the existing services and reducing the negative impact of wastewater discharges in line with EU standards. Energy efficiency components of the Project are expected to substantially improve the production efficiency of the company by cutting energy costs and its environmental sustainability by reducing carbon emission by at least 6,000 tonnes/year.

The objective of the GESF sub-component of the Project (the “GESF Project”) is to improve the energy efficiency of Valcea water and wastewater operations.

As a result, a EUR 5.3 million investment programme, which constitutes the GESF Project, has been developed for the following priority sustainable energy components:

- Small Hydroelectric Power Plants (“HPPs”): small turbines, installed between water reservoirs and the downstream water treatment plants, for recovering the hydraulic energy of the water flows which otherwise would be lost; the investment includes the rehabilitation and capacity increase of the existing Stan Valley HPP and the construction of three new HPPs near Vladesti and Ramnicu Valcea, for a total installed capacity of approximately 2 MW. These investments are expected to increase the share of renewable energy generation at the country level on one hand and decreasing the Company’s dependence on electricity supplied by national grid;

- Energy Management System (“EnMS”): electronic metering units at the main consumers levels, integrated with a cable data-collection system and a central PC unit equipped with the required software for monitoring wastewater operations. The EnMS will provide more accurate information on energy losses (where and why such losses occur) and enable the Company to constantly improve its energy efficiency.

The proposed technical co-operation assignment is designed to technically scope and subsequently support implementation of the GESF Project for which the Company will be the main implementation partner. The beneficiary will also be the Company which has created a Project Implementation Unit (“PIU”) to handle the day to day management of
implementation. In addition to supporting the implementation of the GESF Project, the Consultant will play a role in helping to raise implementation capacity within the Company, who will operate the assets upon completion.

These Terms of Reference cover the scope of the Consultant’s services.

2. OBJECTIVES

The overall objective of the assignment is to facilitate the timely and effective implementation of the GESF Project by ensuring the GESF-funded components are well-prepared technically and tendered and contracted effectively. This will include support to the Company with design, procurement and disbursement, and environmental and social (E&S) requirements.

In addition, the Consultant shall prepare a Feasibility Study which shall assess the economic viability for the development, implementation, and operation of a biogas based electricity generation facility based on the sludge and similar waste managed by the Company.

3. SCOPE OF WORK

3.1 Introduction

The Consultant shall support the PIU with the following tasks which refer to the whole GESF project:

- Design and prepare the Technical Specifications for the works and/or goods;
- Draft the tender documents (including EHSS requirements for contractors), carry out the tendering procedure, prepare the evaluation report and contract, and submit the necessary documents to the EBRD, when requesting the issue of “no objection” as required;
- Provide contract supervision and administration; including implementation of the Environmental and Social Action Plan (ESAP), environmental and social monitoring plan, Stakeholder Engagement Plan (SEP) and preparation of annual environmental and social reports to the Bank, in as much as they relate to the GESF Project;
- Ensure the PIU arranges payments to the GESF Project contractor, to whom payment has been certified, to ensure that all such payments are made in due time, and that appropriate control and record systems are in place to ensure compliance with financiers and the country reporting requirements;
- Ensure that all reports required by the EBRD for implementation of the GESF Project are submitted on schedule;
- Prepare an integrated time schedule for progress meetings with the various parties; attend meetings together with the PIU to discuss GESF Project issues on a regular basis; support reporting and prepare and circulate minutes of the meetings, including follow-up actions required to ensure progress.
- Prepare a Feasibility Study for the development, implementation, and operation of a biogas based electricity generation facility
3.2 Design and preparation of Technical Specifications

3.2.1 Initial data collection
The Consultant shall review available and collect missing initial technical data with regard to the contract to be implemented under the GESF Project.

Currently the Company has available the Feasibility Study and Technical Design (both only in Romanian language).

3.2.2 Development of employer’s requirements

Based on the available data described at paragraph 3.2.1 the Consultant shall develop the complete employer’s requirements including technical requirements, drawings, Bill of quantities/Schedule of payments, etc. The designs shall be sufficiently detailed to allow the works to be procured and to enable an accurate cost estimate to be made. The designs shall provide such details as location, size, number, capacity, strength, equipment and works specifications. The design assumptions and criteria used to develop the designs shall be clearly documented.

The Consultant shall review the required design and technical specifications and complete them in the detail appropriate for the type of contract and sufficient for inclusion in tender documents. All design specifications shall meet requirements of Romanian Law and international standards, where appropriate. It is anticipated that the Consultant may need to sub-contract a local design institute where relevant to ensure compliance with the requirements of the local construction legislation. The Consultant will provide continuous supervision of the design works, as well as quality assurance.

The Consultant shall base his technical solutions on the best industrial practice and innovative solutions.

Consultant shall prepare technical specifications and bill of quantities in accordance with the “Guidelines for Preparation of Technical Specifications and Bill of Quantities”, for works portion and “Notes for Preparing the Schedule of Requirements” for goods portion.

The document shall be made available both in Romanian and English.

3.2.3 Obtaining of approvals by authorities
The Consultant shall assist the Client with obtaining necessary approvals and permits by authorities for design prepared by the Consultant.

3.3 Procurement Support

3.3.1 Procurement Monitoring
The Consultant will oversee all activities and ensure that all procurement is carried out in accordance with EBRD Procurement Policies and Rules.

3.3.2 Advice on procurement strategy
The Consultant will provide advice with respect to all aspects of the procurement strategy. This will include, *inter alia*: Forms of Contract, Optimum contracting timetable, Supervision Requirements selection of Dispute Resolution Procedure.
3.3.3 Support during the preparation of the Tender Documents:
The Consultant will support the PIU to prepare the tender documents. To this end, the Consultant will, inter alia:

- Review available technical specifications and documentation
- Ensure that the technical specifications and E&S requirements are converted into a form suitable for inclusion in Tender Documents.
- Advise on the possibilities for alternatives, cost savings value engineering opportunities etc and the treatment of these in the Tender Documents.
- Draft tender documents based on appropriate EBRD standard Tender Documents templates.

3.3.4 Support during the procurement process
The Consultant will provide support to the PIU throughout the procurement process. To this end, the Consultant will, inter alia:

- Draft and ensure that all procurement notices are placed in a timely manner in accordance with the EBRD Procurement Policies and Rules.
- Ensure that all approvals and no-objections are applied for in a timely manner.
- Carry out the administration of the tender process, ensure that appropriate records are kept, documentation is properly stored, recorded and managed, and confidentiality is maintained.
- Prepare draft responses to Tender enquiries, arrange for approval and issue and record the same.
- Arrange any data rooms, site meetings, information meetings or other pre-tender events, and record same.

3.3.5 Support during the evaluation process
The Consultant will take the lead in organising and managing the evaluation process. To this end, the Consultant will, inter alia:

- Give guidance on the composition of the evaluation committee and to the committee as required.
- Provide draft detailed technical evaluation report for the consideration of the committee. Compile the evaluation report in the required format, including all technical and financial analyses, records of consultation with external parties by the committee and clarifications requested and receive.
- Arrange for meetings of the evaluation committee, attend as an advisor and record these meetings, presenting the minutes for approval by the PIU Director.
- Document the committee’s deliberations in relation to the evaluation report and compile the agreement there into the report prior to seeing all approvals.
- Ensure that all queries and complaints are promptly attended to as appropriate and copy such inquiries as appropriate to the Bank.

3.3.6 Support during contract finalisation
The Consultant will provide support to the PIU during contract finalisation. To this end, the Consultant will, inter alia:
• Prepare a brief for the PIU indicating all the items to be resolved in the clarifications pre-contract, if any.
• Attend pre-contract discussions, if any, and document the discussions, updating the contract documents as necessary and seeking all necessary approvals.
• Advise on the validity of performance and other contract-related securities.
• Circulate the Contract as required by the relevant Rules.
• Notify unsuccessful Tenderers.
• Ensure that all queries and complaints are promptly attended to as appropriate and copy such inquiries as appropriate to the Bank.

3.4 Preparation of the Feasibility Study for the development, implementation, and operation of biogas based electricity generation

The purpose of this task is to undertake a Due Diligence/Feasibility Study that will identify, assess, evaluate and propose to the Bank, the Company and the City the most cost-efficient and environmentally friendly solution to improve the Company’s sludge management and as well as the technical and economic viability of the development, implementation, and operation of biogas based electricity generation facility based on the sludge managed by the Company.

To this end, the Consultant shall undertake to:

- review the existing management and production of sludge
- review any Sludge Management Action Plans prepared during the implementation of the Valcea R2CF project;
- assess the future sludge production;
- assess the potential for carbon credits trade and other incentive schemes for renewable energy which are supported by the EU or Romanian Government;
- assess the technical, economic and environmental & social viability of an investment in development, implementation, and operation of biogas based electricity generation facility based on the sludge;
- if technical and commercial viable, prepare the technical solution for the investment as well as an implementation plan and a procurement strategy, which shall also consider a PPP or DBO type of contract.

3.5 Contract administration support

The Consultant will produce a one-page summary pre-implementation briefing for the PIU for the contract. This briefing will act as an aide memoir for the client and include any key or outstanding issues that need to be taken into account during GESF Project implementation.

3.6 Supervision of the works contracts and administration of the supply of goods contracts

The Consultant will perform the duties of the FIDIC Engineer/the GESF Project Manager or equivalent, as these may be attributable to, specified and/or implied by the contract, in accordance with the laws, technical standards and construction norms and rules.

In order to do so the Consultant will inter alia:
• review and approve the working drawings prepared by the Contractor;
• supervise the works and approve all materials, construction techniques and workmanship on a day-to-day basis in accordance with the contract(s);
• provide expert advice on all aspects of the works undertaken, especially regarding GESF Project supervision, measurement, contracts monitoring and quality control;
• ensure the proper programming, recording, measurement and accounting of the works by means of contemporary management and measurement techniques;
• carry out monitoring of the GESF Project progress and promptly report to the Company details of any aspect that may jeopardize the progress of the works, as well as any implications such aspects may have on the original time of completion or cost of the works, and the measures being (or to be) adopted to overcome such factors;
• approve the contractor’s work programmes and sources of construction materials and characteristics thereof;
• approve adjustment of the constructions on the given location and instruct the contractors on these issues;
• determining by measurement the value of the works in accordance with the Contracts documents;
• issue Interim Certificates for interim payments to the PIU for approval and certifying quality, etc. and completion of all, or parts of, the works;
• determine the value and time impact of variations, reviewing new rates proposed by the Contractor and making recommendations to the PIU for the acceptance (as appropriate) of revised rates and the issue of Variation Orders;
• ensuring that environmental and social mitigation measures are implemented during construction and as permanent works are implemented as required by the ESAP;
• ensuring that health and safety requirements (including on-site movements) are met and that the minimum disruption to operations is caused by the contract works as required by the ESAP;
• facilitate arrangements between the Contractor and utility undertakers and owners of private apparatus sharing occupation of the worksite;
• support the Client in the interim and final acceptance of works;
• agree the final measurement and payment on completion of contracts;
• verify “As-built” drawings supplied by the Contractor;
• advise the PIU on all matters related to the execution of the contract(s), including settlement of the Contractor’s claims;
• prepare works maintenance programme;
• carry out maintenance inspection visits to each contract during the defects Liability Period;
• carry out other inspections, when necessary and envisaged under the contracts;
• participate in acceptance of equipment delivered.

The Consultant shall seek prior approval from the PIU before:

• issuing any Variation Order with financial or time implications, except in an emergency situation when the approval of the PIU shall be obtained as soon as practicable;
• sanctioning additional items, sums or costs;
• approving the sub-contracting of any part of the works;
• approving any extension for the time(s) for completion.
3.7 Arrangement of timely disbursement under the contracts

- prepare or sum up cash flow forecast for the contracts and the “GESF Project” as a whole;
- assist with financial planning;
- verify the invoices and payment documents for all contracts;
- prepare disbursement applications according to EBRD requirements;
- assist with opening letters of credit, where appropriate.

3.8 Exit Strategy

Three months before the end of the assignment, the Consultant will develop an exit strategy. This strategy will outline measures that need to be undertaken in order to ensure a smooth exit, and to ensure that the PIU is able to function without any additional support following the end of the assignment.

4. IMPLEMENTATION ARRANGEMENTS AND DELIVERABLES

Implementation Arrangements

The Consultant will sign the contract with the Company. The assignment is expected to start in July 2015 and have a duration of 16 months (out of which 9 months of works supervision and 7 months support in the tendering process).

The Consultant will supply all necessary computer hardware and software required to deliver the services, together with the necessary office equipment, which will be handed over to the Company at the end of the assignment.

The Consultant will provide residential accommodation for their specialists, and local and international transportation. The Consultant will also be responsible for all salaries, fees, allowances, insurance, leave pay and taxes for the staff involved in the assignment.

It is expected that the Consultant will be provided a furnished, serviced and maintained office accommodation, for which the Company has the right to recover its costs. The main GESF Project office of the Consultants shall be located in Ramnicu Valcea, Valcea County, Romania.

All available GESF Project information, reports and documents will be made available for the Consultant by PIU and the Company.

All documentation related to the works is and will remain the property of the Company after completion of the assignment. The Consultant shall not publish, use or dispose of this documentation without written consent of the Company.

Deliverables

The Consultant will prepare, in addition to the complete Tender Documents (including the technical requirements, drawings, Bill of quantities), the following reports: Inception,
Quarterly and Final Reports and an Exit Strategy. All deliverables will be subject to prior approval of the Company and shall be prepared in the Romanian and English languages.

**Inception Report**

Not later than four weeks after commencement of the services, the Consultant will prepare and submit the Inception Report. This report will include the information about the status of the GESF Project preparation and implementation, the Consultant’s assessment of effectiveness of the Loan Agreement, revised overall procurement plan and contracting strategy. The expected GESF Project implementation schedule corrected in accordance with the realistic status will be attached to the report, as well as the Consultant’s work schedule for the next quarter.

**Quarterly Reports**

Throughout the entire period of rendering the services the Consultant shall submit the Quarterly Reports by the fifteenth day of the following quarter. Each report will show events and progress for the Consultant’s activities of each of the main tasks.

During the works execution and supply administration stage the report shall show events and progress of the works for the previous quarter.

The format of quarterly reports shall be agreed by the Company and the EBRD and shall include, but not be limited to, the following:

- chart and description of work and goods of each stage: production, transportation, construction, installation, testing, commissioning, guarantee test and acceptance;
- cash flow forecast;
- comparisons of actual and planned progress including percentage completion achieved for each activity;
- details of any aspects which may jeopardize the completion in accordance with the Contracts, and the measures being (or to be) adopted to overcome such aspects;
- copies of the assurance documents, test results and certificates of materials;
- safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations;
- review and update of investment grant log frame: progress with regard to output and where possible outcome;
- update on implementation status of ESAP and SEP;
- other information as relevant.

In addition to the hard copies, all the reports shall be provided electronically in Microsoft Word and Excel or PDF format to all parties.

**Exit Strategy**

Three months before the end of the assignment, the Consultant will develop an exit strategy as outlined in 3.11 above.
Final Report

The Consultant will prepare a draft of the Final Report one month prior to the end of the Contract and submit it to the Company with a copy to the Bank. The Final Report will be a review of all Consultants’ tasks, the level to which they were fulfilled and will include all necessary conclusions. Within two weeks of receipt of the Company’s comments and suggestions the Consultant shall prepare the finalised version of the report.

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The Consultant shall prepare hard copies of all reports and deliverables in Romanian language and in English language which shall be delivered as follows:

- **PIU:** 2 copies Romanian, 1 copy English
- **Bank:** 1 copy English

5. **PROFILE OF THE CONSULTANT**

The Consultant shall be responsible for mobilisation of qualified engineers, technicians and other professional staff with the proven experience in the administrative management, procurement, design and supervision of similar construction works and acquiring of equipment for the GESF Project, in comparable climatic and geological conditions.

It is anticipated that the Consultant’s team shall include the following minimum expertise with short-term support as required in other disciplines:

- “GESF Project” Manager – expatriate and/or local;
- Hydroelectric Power Plants Desing Engineer (Design) – expatriate and/or local;
- Biogas Power Plant Design Engineer – expatriate and/or local;
- Financial Specialist – expatriate and/or local;
- IFI Procurement and Contracts Specialist – expatriate and/or local;
- Engineers (Construction Supervision/FIDIC Engineer(s)) – expatriate and/or local;
- Environmental and social specialist - local;
- Administrative Assistant(s)/Translator(s).

All experts shall have a minimum of 7 years experience of the activity for which they are proposed including:

- have design and “GESF Project” management experience gained in countries with climatic conditions similar to the “GESF Project” sites;
- have construction and supply experience gained in countries with climatic conditions similar to the “GESF Project” sites;
- have experience in design of Micro Hydroelectric Power Plants and Biogas Power Plants;
• have experience in (i) planning and design activities; (ii) assistance with planning and design activities; (iii) project management; (iv) project management assistance; (v) engineering; (vi) procurement of goods, works and services;
• have a good knowledge of procedures and rules of procurement of international financial institutions, such as the World Bank, or EBRD, and in FIDIC and/or World Bank/EBRD contractual arrangements;
• have a good knowledge of requirements of Romania legislation concerning construction, environment, health and safety, civil law applicable to the and public finance issues.
• Good knowledge of the Romanian incentive schemes for renewable energy production and CO2 emissions.

It is expected that the Consultant will engage a sufficient number of local engineers to support the international consultants (if applicable) in engineering supervision of multiple construction/works contracts.