## The Shell Petroleum Development Company of Nigerian Limited

## (Operator of the NNPC/Shell/TEPN/Agip Joint Venure)

# Expression of Interest for a Feasibility Study for A Model Waste Management Plant in Rivers State Nigeria

#### **Introduction and Background**

The Shell Petroleum Development Company of Nigeria Limited (operator of the NNPC/Shell/TEPN/Agip Joint Venture), the British Council (BC) and Living Earth Nigeria Foundation (LENF) are collaborating to improve waste management and sanitation in Port Harcourt City and its environs. Urbanization, rising population, inadequate social amenities and the lack of sector-based investment are some of the factors that have contributed to poor waste management in the city. Waste management is a global issue given its negative impact on the environment. According to the United Nations Environment Programme (UNEP), overall quantities of waste are generally increasing hence the need for articulated waste management.

This collaboration between SPDC/BC/LENF will support government efforts at waste management and environmental sanitation. Interested firms and consultants are invited to participate in a detailed feasibility study for the establishment of an appropriate recycling plant in Port Harcourt, Rivers State. This study will enable the partners to:

Select appropriate technology and scale of a recycling plant for waste generated in Port Harcourt and its environs. Evaluate the technical and economic feasibility of the project.

#### SCOPE OF WORK

- Detailed survey of the current waste management process covering generation, segregation, collection and disposal. This would involve determining the quantities and types of waste generated in Port Harcourt and its environs.
- Determine an appropriate size, scope, location and product type(s) for the proposed plant in line with available waste generation data and other criteria.
- Financial analysis of the project: Project cost estimation (capital, operations and maintenance) Technoeconomic feasibility analysis of the project.
- Row material (domestic waste) Pricing analysis.
- Detailed engineering designs and specification of proposed plant including comprehensive evaluation of commercially available options of plant model(s).

- Detailed survey of on-going and previous recycling efforts in Port Harcourt and environs- status report and reasons for failed attempts if any.
- Examine the implications of existing waste management facilities and how optimisation can be achieved

### **Proposal Submission/Final Selection**

It is suggested that each submitted proposal should include the following sections:

- Executive summary
- Approach and methodology
- Project deliverable
- Project management
- Plant options/model
- Detailed and itemized pricing
- Appendix : References
- Appendix : Project team staffing and expert partnership
- Company overview
- Review existing laws and policies governing waste management and evolve environmental sanitation within Rivers State in relation to the proposed plant.
- Determine a sustainable PPP (private public partnership) management model for the facility, including funding options.
- Evaluate potential project risks and mitigation measures including effects of the proposed.
- Plant on existing waste contractors, scavengers and recyclers.
- Identify detailed operational requirements; human, resources, legal requirements, raw material/spare parts sourcing etc.

- Outline detailed benefits of proposed facility to state, local government, stakeholders and identified product users/services.
- Determine all possible range of spin-off from the establishment of the proposed plant (transport/haulage and packaging)
- Present detailed outline of the market for proposed product(s) e.g. fertilizer.
- Indicate measures to reduce carbon emission in the proposed plant.

#### **Proposal Evaluation**

Consultants and firms shall be selected based on overall organization and methodology (which includes approach, deliverables, timetable of activities), key experts/partners, detailed cost, knowledge of waste management sector, and relevant previous experience.

The decision of the selection panel is FINAL.

## **Deadline for Submission**

Interested consultants/firms should send their proposals on or before 10<sup>th</sup> February 2011 either by email or hardcopies to:

#### The Manager,

Living Earth Nigeria Foundation

### 10 A Railway Close, D-Line Port Harcourt

Email: info@livingearth-nigeria.org