



REQUEST FOR QUALIFICATIONS

RFQ # 2009-001

**Request for Qualifications and Project Scope for Economic Analysis for the Greater Charlotte Region
Biofuels Project**

December 23, 2009

Dear Service Provider:

The **Greater Charlotte Region Biofuels Project**, located in the State of North Carolina, is requesting qualifications for the Master Plan **Economic Analysis**. The requirements for submittal are stated in the attached Request for Qualifications (the "RFQ"). Please review them carefully.

Responses are due to *the Centralina Clean Fuels Coalition at Centralina Council of Governments*, no later than **February 12, 2010 at 2 p.m.**

Physical Address:

Centralina Council of Governments
c/o Centralina Clean Fuels Coalition
1300 Baxter St., Suite 450
Charlotte, NC 28204

Mailing Address:

Centralina Council of Governments
c/o Centralina Clean Fuels Coalition
PO Box 35008
Charlotte, NC 28235

Contact for Delivery Questions Only:

Audrey McCaskill
Email: amccaskill@centralina.org
Ph: 704.372.2416
Fax: 704.347.4710

One (1) electronic copy of the response on a CD (or as an attachment to email), and one (1) unbound original response signed in ink by a company official authorized to make a legal and binding offer along with the corporate seal, plus Four (4) copies of your Response must be submitted in a sealed box or opaque envelope plainly marked with the RFQ number and service description as follows:

Request for Qualifications

Attention: Audrey McCaskill

Name of Company Submitting Response

Master Plan Economic Analysis for the Greater Charlotte Region Biofuels Project

RFQ # 2009-001

RFQ technical questions must be directed to Jason Wager, per the enclosed instructions in the "RFQ Schedule and Process" section below.

Sincerely,

Jason Wager, Coordinator,
Centralina Clean Fuels Coalition

cc: Members of the GCRBF
RFQ

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SUBMITTAL LENGTH

Not to Exceed

Transmittal Letter.....	1 page
Statement of Qualifications.....	2 pages
Scope of Work.....	5 pages
Resumes (maximum of two pages per person)	As needed

PROJECT BACKGROUND

DESCRIPTION

North Carolina aims to acquire 10% of its liquid fuels from local biofuel feedstock by 2017. While much of the state's current biodiesel feedstock is from oil crops and spent cooking oils, another potential feedstock is "brown grease". Brown grease is waste oil from food preparation found in the wastewater stream. Our proposal team intends to develop a Greater Charlotte Region Biofuel Facility (GCRBF), beginning with a sustainable, multi-faceted biodiesel production demonstration system that will turn crops and waste brown grease into a useful fuel.



Figure 1. CMU Sewer grease blockage, 2008

The GCRBF evolved from a collaboration of the Centralina Council of Governments (COG) through its Centralina Clean Fuels Coalition (CCFC) program; University of North Carolina at Charlotte (UNC Charlotte); and Central Piedmont Community College (CPCC). Together, this team proposed a plan that would: integrate Charlotte-Mecklenburg Utilities (CMU) (i) ability to produce reclaimed water at the McDowell Water Reclamation Facility (WRF); (ii) ownership of arable land contiguous to the McDowell Facility site; (iii) research connectivity with UNC Charlotte's Civil and Environmental Engineering Dept, and the Environmental Assistance Office; (iv) utilization of CCPC's Engineering Technology and Horticulture divisions, along with the CPCC Center for Sustainability, and (v) coordination by the CCFC.

A master plan to take GCRBF from demonstration scale to a full-scale version is needed. The plan will be conceived, in part, using data generated from this demonstration. At the macro level this plan will consider the design life of such a facility and the financial, legal, and risk commitments that will be required of CMU; it will also look at the potential for public/private partnerships. At the micro level, master planning will consider maintenance costs, site location, collection, and transport issues. A Life Cycle Assessment (LCA) will be used to assess environmental impacts of the demonstration (and some limited economics of the full-scale biodiesel facility relative to CMU operations as they exist now). A more extensive review of the Economic Analysis for the Master Plan will be completed with the use of external consultants. The LCA with the Economic Analysis will constitute the two major elements of a triple bottom line analysis of the system. The Master Plan will serve as a business plan or blueprint that will be used by CMU that could also serve as a model for other North Carolina municipalities seeking to develop sustainable biofuel from brown grease. **This RFQ is for the Master Plan Economic Analysis.**

SCOPE OF WORK GENERAL WORK REQUESTED

2.1. General Requirements.

This RFQ is to solicit proposals for Economic Analysis. This shall encompass:

A quantitative analysis of financial costs with conventional operation and maintenance, collection, and transport costs of a full scale system and a review of short-term immediate costs; and long-term payback prospects. The analysis will also include costs that parallel the cradle-to-grave analysis of the life cycle assessment. For example, although the brown grease feedstock arriving at the processing site will have some costs associated with collection and bringing it to the site, there are also enormous cost avoidances that are accrued by *not* managing it as it is handled now.

The Economic Analysis should assume that currently collected grease trap waste would be brought to a central receiving and dewatering station, and the costs of this infrastructure should be included. Other pertinent costs will be capital and energy and costs associated with substituting biodiesel for conventional diesel to operate CMU equipment. Emphasis shall be placed on detailing risk factors and reward assumptions. Risk should be weighted in a fashion similar to a traditional Failure Modes Effects Analysis manner that will allow others to have a simple quantification of the risk parameters. If the economic analysis does not support a strong business case for the municipality and/or private investors to pursue brown grease-to-biodiesel conversion, recommendations for system modifications that would strengthen the business case should be made. The business case that emerges from the Economic Analysis shall be adaptable to other municipalities seeking to make similar assessments.

Due to funding and project timeline limitations, this analysis will be a static model that encompasses only two options: (a) cost to pursue full scale facility with multiple feedstocks (canola oil and brown grease,) and grease curbside pickup, and (b) cost to pursue a smaller facility with only grease as the feedstock and onsite acceptance only. These two options may be impacted by the initial data from the LCA and the demonstration data obtained by the GCRBF team prior to June 11, 2010.

In sum, the economic assessment will serve as a business plan or blueprint that will be used by CMU, and could serve as a model for other North Carolina municipalities seeking to develop such a site. Conclusions and recommendations for municipalities interested in alternative fuel generation shall be presented and proforma constructs impacts.

2.2. Equipment.

The Service Provider shall furnish all equipment and supplies for completing the Services as required under this RFQ.

2.3. Budget and Pricing.

The budget allocation for this Economic Analysis is between \$14,000 and \$18,000. Regardless of exceptions taken, Service Providers shall provide pricing based on the requirements and terms set forth in this RFQ. Pricing must be all-inclusive and cover every aspect of the Services. Cost must be in United States dollars rounded to the nearest quarter of a dollar.

2.4. Trade Secrets/Confidentiality.

The final project report will be entered into the public domain and is considered a public record except for material which qualifies as “trade secret” information under N.C. Gen. Stat. 66-152.

RFQ Schedule and Process

The following chart shows the schedule of events to prepare the Service Provider’s Response and anticipated deliverables. The key events and deadlines for this process are as follows:

DATE	EVENT
DECEMBER 23, 2009	<i>Issuance of RFQ to consultants</i>
JANUARY 25, 2010	<i>Letter of Transmittal (includes Request for Qualifications Acknowledgement and Submission of Written Questions) Prior to final Submission. Service Providers who intend to submit a Response shall submit the RFQ Acknowledgement and any written questions for clarification of expectations by this date to Jason Wager at jwager@centralina.org. Questions are due by 2 p.m. on January 25, 2010. A one-time response to all received questions shall be returned by COB January 29, 2010.</i>
FEBRUARY 12, 2010	<i>Final Submission including Statement of Qualifications and Scope of Work Responses are due by 2 p.m. on February 12, 2010, to Audrey McCaskill.</i>
FEBRUARY 22, 2010	<i>Service Provider Selected. Service provider will be notified by the GCRBF that they have been selected, allowing contractual activities to begin.</i>
MARCH 19, 2010	<i>Finalize Contract with Selected Service Provider. Final contract will be entered into with CCOG for the GCRBF.</i>
APRIL 23, 2010*	<i>First progress report from Service Provider. This report will outline the work plan.</i>
APRIL 28, 2010*	<i>Conference call with Lead Team Members.</i>
JUNE 11, 2010*	<i>Second progress report due. This report will outline how the LCA information and demonstration data have been incorporated to date.</i>
JULY 16, 2010*	<i>Team meeting to review progress (50% completion expected).</i>
SEPTEMBER 10, 2010*	<i>Conference call for finalization of Economic Analysis and Process Diagrams</i>
OCTOBER 22, 2010*	<i>Final report and presentation to the team</i>

* While this date should be considered “firm,” scheduling flexibility may be granted, at the discretion of the GCRBF Team, if absolutely necessary to meet unforeseen schedule conflicts.

LETTER OF TRANSMITTAL

A letter of transmittal (indicating Request for Qualifications Acknowledgement with Submission of Written Questions Prior to final Submission) shall be submitted. The transmittal letter shall contain the names of the Project Team, Project Manager, Key Personnel who will be assigned to the project, and Key Subcontractors. The Project Manager shall be an employee of the lead firm and all subcontractors shall be identified. The primary office location(s) where the design and management work will be performed must be stated.

STATEMENT OF QUALIFICATIONS (SOQ) AND SUMMARY FORM

With the Final Response, the Service Provider(s) must submit an SOQ. For all projects listed in the SOQ, a very brief project description must be included, demonstrating that the firm(s) and the persons proposed for this project meet the qualifications required.

SOQ Summary Form

The SOQ shall provide information to demonstrate that the firm(s) and the people proposed for this project have the qualifications, experience, competence and ability to perform each of the items listed in the Scope of Work and RFQ Schedule and Process. These qualification requirements do not preclude an individual or small firm from being a successful Service Provider.

Minimum Qualifications

Project Team and Lead Firm's Qualifications and Experience

The lead firm shall provide information that demonstrates its experience as a prime or subcontractor on previous projects involving economic analysis of a manufacturing or wastewater treatment facility. The lead firm shall identify its technical personnel, and describe their qualifications and experience, as they relate to this project, or other similar projects. Experience gained from water or wastewater treatment projects should be provided, and the experience of the specific individuals proposed to do the work should be specified. The lead firm shall oversee and coordinate the activities and production of the project. The project manager shall be a member of the lead firm.

To qualify for this project, the firm(s) must demonstrate they have experience as a prime or subcontractors on similar projects. The referenced experience must describe example(s) of similar projects that show that the firm was successful (i.e., complete work within time and budget constraints and met project goals). Production plant or treatment plant experience should include at least one project implemented within the past seven (7) years.

Project Manager/Key Personnel Qualifications

Discuss the roles, qualifications, and experience (both technical and managerial) of the Project Manager. The Project Manager will be the primary client contact and is responsible for the day-to-day management of the project and for ensuring that the project schedule, budget and scope concerns are met. The Key Personnel are the individuals immediately responsible for the technical excellence of the work and must have at least five (5) years of experience in their respective disciplines.

Other Key Personnel may be the same person with multiple roles within the project. The following information should be provided for the Project Manager and Key Personnel:

- Years of experience
- Percent (%) time available for this project
- Resumes

Identify project manager and key technical personnel. Highlight specialized experience and qualifications of team members, as they relate to this project.

SCOPE OF WORK CONTENT

The RFQ response shall be organized and written to demonstrate the project team's approach to the project.

Project Approach (Scope of Work Delivered):

The response should include a clear and complete discussion of each project task required to fulfill the project objectives, and in sufficient detail to present the approach, using the Scope of Work outlined herein as a guide. Discuss the reasons for any significant issues related to the scope of work. Tasks must include:

- Basic Analysis of Energy, Waste Stream and Water Use for 2 Scenarios
- Cost Estimate for 2 Scenarios
- Risk Analysis for 2 Scenarios
- Conclusions and Recommendations for Municipalities Interested in Alternative Fuel Generation

Fee Request:

The response must include a Fixed Fee Request. This shall be the cost for services provided.

Project Management and Staffing:

Include a clear statement of project team responsibilities and reporting relationships, work structure for project control and review, and allocation of staff identified by name and firm for key tasks. Indicate the portion of time that key staff will be available to work on the project. Indicate any tasks that the firm assumes will be completed by GCRBF team with anticipated delivery dates.

Schedule and Deliverables:

The response must include a schedule for the project including deliverables and other milestone dates.

Project Value:

The response must include a description of the proposed economic analysis final report, including the facility footprint (simplified process block diagrams). The facility footprint should address a number of inputs, including for example safety, electricity, heat, process water, and wastewater treatment needs for a sustainable operation. In addition, the economic analysis should also suggestions on ultimate disposal and/or reuse of by-products such as glycerin and washwater.