
TERMS OF REFERENCE FOR THE INVITATION OF BID FOR THE CONSULTANCY SERVICES TO ANALYSE THE IMPACT ACQUISITION OF CONSULTANCY SERVICES TO ANALYSE THE IMPACT OF ENERGY ON THE PERFORMANCE OF THE ECONOMIC SECTORS FOR A PERIOD OF FOUR (04) MONTHS

1. BACKGROUND

1.1 The Department of Energy is in the process of developing an Integrated Energy Plan (IEP), which will serve as South Africa's energy sector's master plan up to 2050. The development of a national Integrated Energy Plan (IEP) was envisaged in the White Paper on Energy Policy of 1998 and the Department of Energy is mandated to develop and review it on an annual basis. The IEP will provide direction for the country's energy supply and demand requirements. It will propose the most cost effective way of supplying energy considering both domestic and global constraints. The Energy Act requires the IEP to have a planning horizon of no less than 20 years. As such, a better understanding of the energy requirements of the nine economic sectors is critical toward fulfilling the Department's mandate in the context of the IEP.

2. OBJECTIVE

2.1 The study seeks to provide an analysis of the nine economic sectors:

- i) Manufacturing
- ii) Construction
- iii) Utilities
- iv) Wholesale and retail
- v) Transport
- vi) Mining
- vii) Government and personal services
- viii) Agriculture
- ix) Finance

2.2 Such disaggregation will present the Department with a better understanding of the dynamics in each of these sectors. For example, a better understanding of the relationship between the performance of the manufacturing sector and the energy sector is required if South Africa is to develop energy policies that would enhance the country's competitiveness. It is worth noting that the manufacturing sector, as manifested by the negative trade balance, has broadly been losing competitiveness since the early 2000s. As to the factors attributable to this phenomenon it would be important to examine the extent to which energy supply and prices have played (or continue to play) a role.

3. DESIGN OF THE STUDY

3.1 The analysis should seek to provide a better understanding of the impact of the energy sector on the following key elements:

- i) Production volumes
- ii) Employment
- iii) Investment

3.2 The dimensions to be considered include:

3.2.1 The impact of a price change per energy service or product in the performance of each of the nine sectors. For example examining how a price change in primary energy sources and final energy affect sectoral performance.

3.2.2 The impact of supply disruptions i.e. shortage. Sectors that are mostly impacted by supply disruptions should be highlighted and efforts should be made to present possible mitigation measures.

3.2.3 Identify energy intensive sectors and benchmark them against international best performers.

3.3 Focus should only be on all primary energy commodities and final energy forms and not only electricity. Primary energy sources to be considered include coal, natural gas, crude oil and where applicable uranium. Final energy should include electricity and petroleum products (diesel, petrol, LPG, Jet Fuel and paraffin)

3.4 The statistical tool used for the study should preferably be EViews statistical software. Alternatively the data must be collected and packaged in such a manner that it can be easily ported into the EViews statistical package.

4. SCOPE OF WORK

4.1 Methodology

4.1.1 Identify a suitable methodology and economic model(s) to answer the key questions some of which are presented in section 3 above.

4.1.2 Data to be used for the study should be adequately referenced and should be no less than 20 years in terms of annual data point. Where feasible quarterly and monthly data can be used and span at least 20 years and this should not replace annual data as this is the core of the analysis.

4.1.3 Data transformation processes should be clearly defined. For example the transformation of actual data to natural logs; data characteristics i.e. order of integration of individual series $I(0)$, $I(1)$ etc.

4.1.4 The model(s) and data together with accompanying assumptions will be the property of the Department of Energy.

4.1.5 Information required from the Department of Energy is to be handled as confidentially unless otherwise stated.

4.2 Analysis

4.2.1 Sectoral analysis

- Primary analysis: nine economic sectors
- Secondary: analysis by sub-sectors according to SIC3

4.2.2 Temporal analysis

- Primary: annual
- Secondary: quarterly and monthly

5. KEY DELIVERABLES

- 5.1 A proposal outlining the selected methodology.
- 5.2 A report outlining:
 - 5.2.1 Historical and future impact of energy prices on sector employment, investment and output of each of the economic sectors from 1980 to 2012 and forecasts to 2030. Depending on the availability of data the breakdown of sectors should be done according to the SIC3. (Each sector will have employment, investment and output as dependent variables. Energy prices will be the explanatory variable in each of the equations.)
 - 5.2.2 Impact of energy supply on employment, investment and output. (Energy supply will be the explanatory variable while employment, investment and output are the dependent variables).
 - 5.2.3 Recommendations on how any negative impacts originating from the different scenarios can be mitigated.

6. COMPLETION DATE

- 6.1 The project must be completed within four (04) months from the date of signing the contract with the successful service provider.

7. REPORTING REQUIREMENTS

- 7.1 The service provider shall report to the Chief Director: Energy Planning on a monthly basis.

8. EVALUATION METHODOLOGY

8.1 Cost

8.1.1 The service provider will be requested to provide a quote regarding the work to be undertaken for this project.

8.1.2 The total cost must be VAT inclusive and should be quoted in South African currency (i.e.rands). A clearly costed project plan should include the following: Costing and Resource Allocation for activities e.g. data collection and transformation; modeling; sector analysis (each sector should have individual cost line); conclusion; recommendation etc. Each work element should specify the amount to time involved in completing the task. For example, data collection and transformation is five (5) days; modeling three (3) days etc.

8.2 Company Experience

8.2.1 The service provider should at least have five (5) years' experience in economic modeling with time series or cross-sectional data using EViews statistical software. Experience in Computable General Equilibrium (CGE) is also a requirement.

8.2.2 The service provider should provide proof accompanied by correspondence from referees indicating that a similar project was executed as well as their three (03) contactable references.

8.2.3 Failure to submit the above correspondence, bidders will forfeit points in this category.

8.3 Team leader and team member's experience

8.3.1 Team leader and team members must have a minimum of three (3) years' experience in economic modeling with emphasis in the energy sector.

8.3.2 The curriculum vitae of both the team leader and team members must be attached to the technical proposal as proof. The CVs must clearly demonstrate the following aspects:

- Good technical writing and analytical skills
- In depth understanding of the South African Energy Sector
- Economic Modeling

8.3.3 Credentials or track record of prior modeling experience in the energy sector will be an added advantage.

8.4 Qualifications

8.4.1 The team leader and team members must have a qualification in Energy Economics, Economics, Econometrics or Statistics. Certified copies of certificates must be attached to the proposal; failure to submit correspondence bidders will forfeit points in this category.

9. BROAD-BASED BLACK ECONOMIC EMPOWERMENT

9.1 BBEE Requirements

9.1.1 Provisions of the Preferential Procurement Policy Framework Act (PPPFA 2011) and its regulation will apply in terms of awarding points.

9.1.2 Bidders are required to submit original and valid B-BBEE Status Level Verification Certificates or certified copies thereof together with their bids, to substantiate their B-BBEE rating claims.

9.1.3 Bidders who do not submit their B-BBEE status level verification certificates or are non-compliant contributors to B-BBEE will not qualify for preference points for B-BBEE.

9.1.4 In a case of Exempted Micro Enterprise (EME), the following documents MUST be submitted :

9.1.4.1 Verification agencies accredited by SANAS

9.1.4.2 Registered auditors approved by IRBA

9.2 Bidders who qualify as EMEs

9.2.1 Accreditation

- (a) Accounting officers as contemplated in the CCA; or
- (b) Verification agencies accredited by SANAS; or
- (c) Registered auditors (Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates).

9.2.2 The table below depicts the B-BBEE status level of contribution:

B-BBEE Status Level of Contributor	Number of points(90/10 system)
1	10
2	9
3	8
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

10. PROJECT PLAN/METHODOLOGY

- 10.1 The project plan must include a detailed project design and work programme, and how the technical work and outputs will compliment and support the policy development process.
- 10.2 Key deliverables and milestone
- Key deliverables with clear timelines and key dependencies
 - Key milestones.

11. EVALUATION CRITERIA

- 11.1 Bids will be evaluated on 90/10 point system as outlined in the PPPFA of 2011.

The proposals will be evaluated in two phases:

Phase 1: Bidders will be evaluated based on functionality. The minimum threshold for functionality is **70 out of 100 points**. Bidders who fail to meet minimum threshold will be disqualified and will not be evaluated further for price and preference points for B-BBEE.

No.	Criteria	Weights
1	<p>Company Experience/ Track Record:</p> <ul style="list-style-type: none"> ❖ The service provider must have at least three (3) major studies in energy and economics (or energy economics) in the last five (05) years. ❖ Economic modeling (in the energy sector) experience with time series or cross-sectional data using EViews statistical software ❖ Reference letters from the organisations that commissioned the studies (mentioned above). 	<p>40</p> <p>15</p> <p>15</p> <p>10</p>
2	<p>Team leader and team member's experience :</p> <ul style="list-style-type: none"> ❖ Team leader and team members must have a minimum of three (3) years' experience in economic modeling with emphasis in the energy sector. ❖ The curriculum vitae of the team leader and team members must be attached to the technical proposal as proof. 	<p>20</p> <p>10</p> <p>10</p>
3	<p>Qualifications:</p> <ul style="list-style-type: none"> ❖ Team leader and team members must have a qualification in Energy Economics, Economics, Econometrics or Statistics. Certified copies of certificates must be attached to the proposal; failure to submit correspondence bidders will forfeit points in this category. 	<p>15</p>
4	<p>Project Plan</p> <ul style="list-style-type: none"> ❖ The project plan must include a detailed project design and work programme, aligned with the IEP methodology developed by the Department of Energy ❖ Key deliverables with clear timelines and key dependencies ❖ Key milestones. 	<p>25</p> <p>10</p> <p>10</p> <p>5</p>
	Total	100

For purpose of evaluating functionality, the following values will be applicable:

0=	Very Poor	Do not meet the requirements
1=	Poor	Will not be able to fulfill the requirements
2=	Average	Will partially fulfill the requirements
3=	Good	Will be able to fulfill the requirements
4=	Very Good	Will be able to fulfill better in terms of the requirements adequately
5=	Excellent	Will fulfill the requirements exceptionally

Phase 2: Price and B-BBEE

Price	90
B-BBEE compliance	10

12. FORMAT AND SUBMISSION OF THE PROPOSAL

12.1 All Standard Bidding Documents (SBD) must be completed in all respects by bidders. Failure to comply will invalidate a bid.

12.2 Bidders are requested to submit two (2) copies: 1 original plus 1 copy of the proposal and bid documents.

13. CLOSING DATE

13.1 Proposals must be submitted on or before **24 May 2013 at 11H00** at 192 Cnr Visagie & Paul Kruger Streets, Pretoria, in the bid box marked Department of Energy. **No late bids will be accepted.**

14. ENQUIRIES

TECHNICAL ENQUIRIES:

Mr Bongani Motsa

Tel: 012- 406 7790

E-mail: Bongani.Motsa@energy.gov.za

BID ENQUIRIES:

Ms Daisy Maraba/ Ms Rachel Moerane

Tel:012 406 7748/ 7747

E-mail:Daisy.Maraba@energy.gov.za/ Rachel.Moerane@energy.gov.za