

Section 5. Terms of Reference

I. Project Title

Providing advisory support on technical and policy matters related to power sector policies, strategies, initiatives, and trends in Saudi Arabia

II. Project Description

Providing technical support to the Ministry's Deputyship for Electricity Affairs in setting up its strategies and implementing its initiatives, plans related to the power sector, through the following main activities:

- Power Sector Policy Landscape
- Power Sector Security and Resilience
- Technology and innovation strategy
- Transitions in the power sector
- Economic & Financial Assessment
- Reporting of Planning Scenarios and Studies
- Long-term planning report
- Energy Mix in neighbouring countries
- Technical support to PSI team on assigned tasks

III. Scope of Work

1) **Power Sector Policy Landscape**

- ✓ **Description:** The project will investigate policies, regulations, strategies, and other instruments that define the power sector policy and strategy landscape in the Kingdom. The project aims to establish a framework for managing power sector policies and strategies instruments (regulations, procedures, roadmaps, guidelines, etc.) within and outside the energy ecosystem. It also aims to define tools used in identifying and analyzing gaps, map current instruments to sector directions and

objectives, and measure the impact of a policy, a strategy, a program, or an initiative. It also aims to define tools to draft new instruments as needed, define tools for strategy assessment, set KPIs for Strategy implementation, and set a strategy update and review procedure. Centralize management of the existing policy and strategy landscape governing the power sector and collect and analyze methodologies.

- ✓ **Duration of work:** One year

2) **Power Sector Security and Resilience**

- ✓ **Description:** Study and assess the security and resilience of the electricity sector in Saudi Arabia and develop the policies and regulatory capabilities to enhance and support the electrical sector's existing and future efforts on security and resilience.

- ✓ **Duration of work:** One year

3) **Technology and innovation strategy:**

- ✓ **Description:** Developing strategy for technology and innovation applications in the power sector by setting strategic directions, stakeholders, governance, initiatives, and performance indicators. The project will present a framework for the management, support, governance, and development of research at Electricity Affairs. In addition, provide a strategy on achieving the sector goals, mitigating challenges, and leveraging opportunities through research.

- ✓ **Duration of work:** One year

4) **Transitions in the power sector**

- ✓ **Description:** Exploring new trends in power sectors to respond to technical, economic, or environmental needs, such as rural electrification, renewable energy for communities, green certificates, tariff structure, etc.

- ✓ **Duration of work:** One year

5) **Economic & Financial Assessment**

- ✓ **Description:** The goal of the Project is to evaluate planning studies/projects/options

related to KSA power system such as Transmission, distribution, generation, DSM programs, Rural electrification options, etc. to ensure the economic feasibility of the technical options of the projects and comparing to select the optimal solutions and achieve the and will be utilized to optimize Generation allocation, transmission and distribution expansion

- ✓ **Duration of work:** 6 months

6) Reporting of Planning Scenarios and Studies

- ✓ **Description:** Providing support for reporting the results of planning scenarios and studies in professional presentation to the decision makers along with the benchmarking

- ✓ **Duration of work:** 6 months

7) Long-term planning report

1. **Description:** Enhance the contents and presentation of the Long-Term Planning Report presenting the 25-year future plan for the energy sector in Saudi Arabia that includes demand forecasts and a generation and transmission plan.

2. **Duration of work:** 6 months

8) Energy Mix in neighbouring countries

- ✓ **Description:** Survey on the optimal Energy Mix of the power generation sources to meet the future demand along with the energy market structure for the neighboring countries.

- ✓ **Duration of work:** 3 months

9) Technical support to PSI team on assigned tasks:

- ✓ **Description:** providing technical support to the PSI team on a number of topics by developing required studies, conducting relevant analysis and/or business cases,

assessing benchmarks and best practices, developing necessary tools and templates, managing initiatives, developing implementation roadmaps or supporting the design and launch of pilot projects. The topics could be around Power planning, power restructuring, Power performance, and customer-centricity.

- ✓ **Duration of work:** One year

IV. Expected Outputs

- **Power Sector Policy Landscape**

Key Outcome:

- Establishing a well-crafted work process on managing power sector policies and strategies and instruments (regulations, procedures, roadmaps, strategies, etc.) within and outside the energy ecosystem.
- Conducting management consulting services, short-term and long-term research, providing SME, providing benchmarking analysis whenever needed, and producing white paper.

- **Power Sector Security and Resilience**

Key Outcome:

- Conducting management consulting services to provide a holistic framework, benchmarking analysis, and other supporting items.

- **Technology and innovation strategy**

Key Outcome:

- drafting strategy for innovation and technology in the power sector in light of the Ministry of Energy's mandate and power sector strategy.
- Directing the work on research and studies to serve the objectives of the sector.
- Conducting management consulting services, short-term and long-term research, providing SME, providing benchmarking analysis whenever needed, and producing white paper.

- **Transitions in the power sector**

Key Outcome:

- Conducting management consulting services, short-term and long-term research, providing SME, providing benchmarking analysis whenever needed, and producing white paper.

- **Economic & Financial Assessment**

Key Outcome:

- Develop an economic model involving several assumptions to identify the required projects parameters and KPIs such as NPV, IRR, Benefit to cost ratio, Payback Period, LCOE etc..

- **Reporting of Planning Scenarios and Studies**

Key Outcome:

- Professional presentation of planning scenarios and studies to decision-makers along with benchmarking and best practices related to subject studies

- **Long-term planning report**

Key Outcome:

- Enhance the preparation of the long-term planning report.

- **Energy Mix in neighbouring countries**

Key Outcome:

- Identifying the demand forecast, generation mix, market assessment.

- **Technical support to PSI team on assigned tasks**

Key Outcome:

- Conducting management consulting services to provide a holistic framework, benchmarking analysis, and other supporting items whenever needed.

Deliverables	Anticipated payment per deliverable (% of Completion)	Duration of Work	Expected Start
Deliverable 1: Provision of Power Sector Policy Landscape output	30% 40% 30%	12 months	Q1
Deliverable 2: Power Sector Security and Resilience	30% 40% 30%	12 months	Q1
Deliverable 3: Technology and innovation strategy:	30% 40% 30%	12 months	Q1
Deliverable 4: Transitions in the power sector	30% 40% 30%	12 months	Q1
Deliverable 5: Economic & Financial Assessment	50% 50%	6 months	Q2
Deliverable 6: Reporting of Planning Scenarios and Studies	50% 50%	6 months	Q2
Deliverable 7: Long-term planning report	50% 50%	6 months	Q2
Deliverable 8: Energy Mix in neighbouring countries	100%	3 months	Q1
Deliverable 9: Technical support to PSI team on assigned tasks:	30% 40% 30%	12 months	Q1

V. Institutional Arrangement

- a) The specific authority is the Electricity Affairs Deputyship at the Ministry of Energy who will directly supervise the contractor, and to whom the contractor will be directly responsible, reporting to, seeking approval/acceptance of output from the National Project Manager.
- b) The frequency of progress reporting is biweekly or upon the activity needs as well as any need to present report results/outputs to any audience or body.

- c) The institutions/organizations/individuals with whom the contractor is expected to liaise/interact/collaborate/meet with as follow: SEC, WERA, and other entities in the power sector.
- d) The roles/extent of participation of entities involved in the management/implementation of the contract resource: persons to confer with.
- e) The activities/projects will be able to provide offices places inside the ministry.

VI. Duration of the Work

- a) The expected duration of the assignment will be 12 months.
- b) The target date of commencement of the work is Jan 2022, and the expected completion date Dec 2022.
- c) Any form of delay will affect the progress of other studies/projects.
- d) Expected start of all activities in Q1 2022.

VII. Duty Station

- a) The contractor's duty station/location during the contract period will be located in Riyadh, The Ministry of Energy, EA@12 floor.
- b) The contractor will be required to report regularly and present semi-regular at offices during the work.

VIII. Scope of Bid Price and Schedule of Payments

- a) The contract price is a fixed output-based price regardless of extension of the herein specific duration or adding to the scope by increasing the price by a specific percentage.
- b) The computation of contract price should include all the cost components, e.g., purely professional fee, or inclusive of travel, living allowances, taxes, etc.)
- c) The key outputs or milestone activities for which payments will be made, the corresponding percentage of the contract price that will be paid per milestone/output, including the conditions/documentation required prior to the release of any tranches of payment.

IX. Quality Specifications

The Contractor shall perform and implement all the necessary services for the project through its employees in accordance with the highest levels of quality and in the professionally recognized manner and method. The Contractor must submit the quality assurance plan that he intends to implement in the project for review and approval by the Ministry. The plan should include quality control procedures and tools.

X. Safety Specifications

During all the phases of implementation, the Contractor shall comply with all the regulations and rules applicable in the Kingdom concerning safety, health, and the environment, and any regulations and rules specified by the Ministry within the scope of the project's work. He shall ensure that all necessary measures and precautions are taken to comply with these regulations and rules.

XI. Other Conditions:

The contractor is obligated to submit CVs to the project team, the team that will work on the project, and the obligation to provide an alternative in case the ministry rejects any of these CVs, or desires. The contractor is to provide an alternative after the start of work on the project.

The contractor is obligated to provide PMO services, including but not limited to:

- Project status report.
- Update the project schedule and work stages
- Update the risks and constraints of the project.
- Follow-up report on the status of deliveries.
- Interim reports after finalization of each task
- Draft report at the end of study to submit comments and feedback
- Final report on the close of study.

Project communication plan.