

United Nations Development Programme
Country: Kuwait
Project Document

Project Title: Kuwait Annual National Energy Outlook (KNEO) Project

Project Number: 00091765

Implementing Partners: GSSCPD and KISR

Start Date: August 2017

End Date: December 2018

PAC Meeting date: 07 June 2017

Brief Description

Kuwait like many oil producing countries in the world with low diversity of energy mix faces sustainable development challenges related to its primary dependence on the oil sector for growth of its GDP and economic development. Low diversity means any volatility of oil prices directly affect all sustainable development activities – economic, social, and environmental. Kuwait may be vulnerable to changes in global oil demand leading to challenges related to Government revenue volatility when global oil prices change. When oil prices swing upwards, high oil prices boost Government revenues and strengthen economic growth but when they shift downwards, low oil prices could affect Kuwaiti's energy security, its economic development and sustainability of current levels of social safety net that is mainly financed through energy subsidies. One way of dealing with the cyclic nature of revenue flows is to diversify the Kuwait energy sources while reducing energy consumption per capita. Doing so will free more oil for export from domestic use contributing to government revenue. The project is designed to address the challenge by developing a framework to strengthen the institutional capacity in the country to increase the share of renewable energy in the energy mix and the rate of energy efficiency by reducing energy consumption per capita in the Kuwait economy. It will achieve this by strengthening the capacity for evidence-based sustainable energy policy development by laying the foundation for an annual production of the Kuwait National Energy Outlook (KNEO) publication by Kuwait Institute of Science and Research (KISR). The KNEO publication will produce energy data sets and forecasts that will be helpful in informing the implementation of the Kuwait National Development Plan and to effectively integrate sustainable energy in its strategy and framework.

UNDAF/CPD Outcome: Policy and regulatory economic, social and environmental frameworks are in place to build resilience for inclusive, sustainable growth and development.

Expected Output(s):

1. Annual Kuwait National Energy Outlook (KNEO) report initiated.
2. Institutional capacity Development of KISR in relation to annual KNEO production strengthened.

Contributing Outcome (UNDAF/CPD, RPD or GPD):

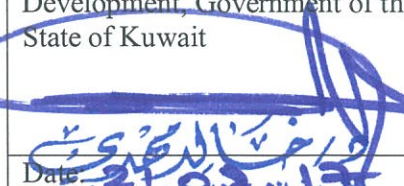
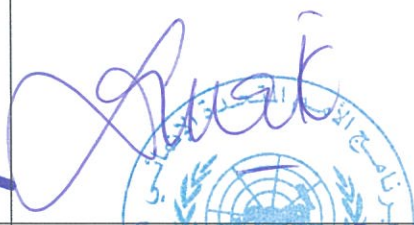
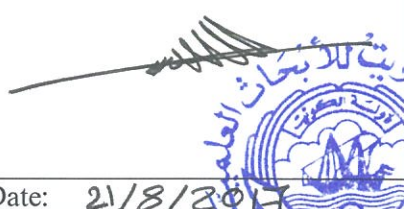
1. Policy and regulatory economic, social and environmental frameworks are in place to build resilience for inclusive, sustainable growth and development.

Indicative Output(s):

1. Annual Kuwait National Energy Outlook (KNEO) report produced
2. Strengthened institutional capacity of KISR for annual production of KNEO

Total resources required:	\$900,000
	UNDP TRAC:
	Donor:
	Donor:
	Government: \$900,000
	In-Kind:
Unfunded:	

Agreed by (signatures)¹:

Government (GSSCPD)	UNDP	Implementing Partner (KISR)
Print Name: Dr. Khaled Mahdi Secretary-General of the General Secretariat of the Supreme Council for Planning and Development, Government of the State of Kuwait	Print Name: Ms. Dima Khatib UNDP Resident Representative a.i	Print Name: Dr. Samira A.S. Omar Director General Kuwait Institute for Scientific Research
 Date: 27/8/2017	 Date: 27/8/2017	 Date: 21/8/2017



Development Challenge

Kuwait is a member of the Gulf Cooperation Council (GCC) countries. The other countries include Saudi Arabia, the United Arab Emirates, Oman, Qatar and Bahrain. The GCC countries including Kuwait currently face common sustainable development challenges related to the dependence on oil for sustainable development – economic growth, social development, and environmental conservation. The oil sector is the main driver for economic development and growth of GDP. Kuwait has low diversity in its energy mix with only 2% supplied from non-oil or gas resources. With the oil and gas sector accounting for about 60 per cent of its Gross Domestic Product (GDP) and about 95 per cent of export revenues², Kuwait is encouraging the diversification of energy resources as a national priority through a focus in the development of large-scale renewable energy projects. For example, with a planned total capacity of more than 2000 MW by 2030, the Shagaya Renewable Energy Park³ will be producing equivalent to estimated 15% of energy from renewable energy resources for Kuwait by 2030. Kuwait is also encouraging the reduction of consumption of energy per capita through various energy efficiency measures.

As a result of the dependence on the oil and gas sector, Kuwait's development challenge is highly linked to its vulnerability to changes in global oil demand, as well as international oil market price volatility. This has led to challenges related to Government revenue volatility that threatens Kuwaiti's energy security, its economic development and sustainability of the current levels of social safety net that is mainly financed through energy subsidies. Reliance on oil and gas also poses a potential of water stress management since most of the water is obtained through energy dependent desalination process and pumping of fresh groundwater to meet drinking water needs.

In addition, Kuwait has seen its economy grow in the last two decades at unprecedented rates and this has resulted to ever increasing energy consumption per capita estimated at 10 times higher than the global average. The high consumption per capita is linked to rapid economic growth coupled with energy subsidy levels of 95% leaving consumers with less incentives to conserve energy⁴. Coupled with the fact that Kuwait is a highly water-stressed country⁵, it faces the challenge of managing twin realities; having one of the highest water usage and energy consumption rate in the world on a per capita basis.

On the economic side, Kuwait's fiscal performance in 2016 was marked by decrease in government revenues that was mainly driven by lower earnings from oil due to the great plunge of world oil prices, which saw a steady decline from a high of around \$115 per barrel in June 2014 to a low of \$33 per barrel in January 2016⁶ significantly putting pressure on the national budget. Although the prices are slowly stabilizing and with an upward swing of prices, the volatility in revenues is occurring at a time when domestic fuel consumption is increasing. This has compounded overall development challenges and necessitates the urgency for diversification of the economy with a focus on energy resources and of the economy through increasing "non-oil growth to improve citizens' livelihood and encouraging the private sector involvement in development activities"⁷ among other development priorities.

² http://www.opec.org/opec_web/en/about_us/165.htm

³ Arab Future Energy Index™ (AFEX) Renewable Energy 2016, RECREE, Cairo, Egypt. Ref. The first phase consists of 70-MW Renewable Energy Park (10 MW wind energy, 10 MW PV, and 50 MW CSP). Second phase, will expand the capacity to 1000 MW, and the third phase to 2000 MW (1100MW of solar-thermal generation capacity, 750MW of solar PV and 150MW of wind power). In addition, the Ministry of Electricity and Water (MEW) in partnership with the Kuwait Authority for Partnership Projects (KAPP) are developing the 280MW Al Abdaliyah hybrid power plant project, which will combine 60MW of solar capacity and gas fired units.

⁴ Arab Future Energy Index™ (AFEX) Energy Efficiency 2015, RECREE, Cairo, Egypt. Page 26

⁵ World resources Institute at <http://www.wri.org/blog/2015/08/ranking-world%E2%80%99s-most-water-stressed-countries-2040>

⁶ <http://gulfnnews.com/business/sectors/energy/russia-opec-deal-unlikely-on-oil-prices-1.1664709>

⁷ Kuwait Vision 2035

On the social side, social-sustainability issues such as social safety net targeting, inequity, gender aspects, diversity, education and health services, youth engagement and involvement in decision-making are dependent upon economic performance. Like other countries in the Middle East region, Kuwait has high youth population and the Government is dealing with the challenge of ensuring that they are entering the workforce with the right skills. Kuwait also has a large number of temporary migrants and expatriate work force that has grown to account for between 63% and 68% of total population with the result of increasing demand of goods and services in the overall Kuwait economy⁸.

On the environmental side, energy related sustainability issues such as rising per capita energy consumption, inefficiency linked to resource use including water use, waste management, recycling, and increasing pollution remain a challenge. The increasing energy intensity and the rising energy consumption rate per capita threaten the current levels of energy security.

Kuwait has made a lot of progress especially in terms of human development, but a number of challenges still remain to ensure the sustainability of those gains in the longer term. Since the root cause for many of the challenges are due to the continued high dependence on petroleum as the economic base, there is urgency for accelerating the on-going process of diversification of the economy as identified in the Kuwait vision 2035⁹.

Increasing diversification call for the integration of sustainable sources of energy in the implementation of the strategy and framework of the Kuwait National Development Plan (KNDP). It calls for increasing the percentage of renewables in the Kuwait energy mix and rate of energy efficiency in the Kuwait economy and the development of institutional and human resource capacity to support implementation. Effective implementation will require evidence-based planning for energy resources with clear data sets of current and future forecasts of energy scenarios. The development of capacity to annually produce the Kuwait National Energy Outlook is an important feature of evidence-based planning and achieving laid out goals of the Kuwait National Development Plan. Already, great success in diversifying energy resources has been recorded especially in the installation of solar energy panels in public buildings, planning of large solar energy plant in Shagaya and initiatives to reduce energy consumption per capita in buildings¹⁰. In addition, diversification of energy resources and reduction of energy consumption per capita will directly contribute to achievement of Sustainable Development Goal (SDG) 7 on energy, SDG13 on climate change and SDG12 on sustainable consumption and indirectly to SDG1 to 6 on poverty, hunger, health, education, gender equality and; water and sanitation. In the long run, it will indirectly contribute to SDG 8 on decent work and economic growth.

⁸ Kuwait's Initial National Communications under the United Nations Framework Convention on Climate Change. November 2012. Page 2.

⁹ http://www.irena.org/DocumentDownloads/Publications/IRENA_Market_GCC_2016.pdf page 21. "Kuwait's Vision Plan 2035 and current 5-Year Development Plan focus on economic diversification and aim to position the country as a regional trade and financial hub. The plan focuses on infrastructure investment, including transportation, a new port, and the development of the business hub 'Silk City' in Subiyah".

¹⁰ <http://www.solargcc.com/kuwait-solar/> "The state hopes to partner with international companies in a three-phase process, with the goal of generating a total of 2,000 MW of renewable energy (15% of its total energy needs) by 2030. The first phase will be a 70 MW energy park scheduled to be completed by 2016. This facility will be built on a 100-square-kilometre (39-square-mile) area in Shagaya, a desert zone 100 km (62 miles) west of Kuwait City, near the borders with Iraq and Saudi Arabia. The second and third phases are projected to produce 930 MW and 1,000 MW, respectively".

I. STRATEGY

The State of Kuwait recognises the need to diversify its energy sources to address the issues of potential future energy insecurity and also the cyclic revenue from the oil sector due to global oil price volatility. The Government also recognises the need for reducing energy consumption per capita without compromising on the standard of living in Kuwait and on economic growth.

The Government has responded to the challenges discussed above by putting together an integrated approach for including renewable energy technologies such as solar with energy efficiency measures, especially in public buildings planning of large solar energy plant in Shagaya and initiatives to reduce energy consumption per capita in buildings.

UNDP Country Office in Kuwait and the General Secretariat of the Supreme Council for Planning and Development (GSSCPD) assessments during the preparation of the Country Programme Document (CPD) and Country Programme Action Plan (CPAP) (2015-2018) identified the following outcomes and outputs which guide the design of this project document : inclusive and sustainable development and growth with a clear output to “support the Ministry Of Electricity and Water and other key Kuwaiti institutions in developing and implementing a National Strategy and Action Plan for Energy Efficiency” including inter alia “the production of evidence-based Energy Outlook Reports with the Kuwait Institute for Scientific Research (KISR)”¹¹. UNDP Country Office is developing pipelines of projects to implement the outputs as part of the new country programming and in full alignment with the Kuwait National Development Plan priorities. Sustainable Energy is one of the key programme areas agreed upon with the GSSCPD. These outcomes are in line with the Sustainable Development Goal 7 (SDG 7) on energy and SDG 13 on climate change and will contribute to achievement of other SDGs.

One of the critical support areas identified is the strengthening of the institutional capacity of Kuwaiti institutions in developing and implementing a National Strategy and Action Plan for Energy Efficiency. Support will include building capacity for evidence-based planning for achieving measurable energy use reduction goals through energy-saving programmes. Diversification of energy resources to include renewable energy is an important part of this effort. The Government is already implementing some measures that focus on achieving the objective of reaching 15% energy supply from renewables and is making progress in campaigns towards achieving energy efficiency¹². An integrated framework is needed to sustain the momentum that is currently there to increase the use of renewable energy and reduce consumption per capita. Energy efficiency will address the challenge of high energy consumption rate per capita and reduce the burden on subsidizing the social safety net while at the same time address the nexus between energy, water, food and other sustainable development challenges in Kuwait.

In recognition of the challenges facing the energy sector and the current national development priorities, UNDP, the GSSCPD and Kuwait Institute for Scientific Research (KISR) decided to collaborate on the preparation of Kuwait National Energy Outlook.

In addition, the CPAP identified actions for strengthening of capacity for evidence-based sustainable energy policy development and planning as an important element in building Kuwait institutional capacity. An integrated strategy was recommended during the development of the CPAP to develop and implement national energy efficiency and renewable energy action plans. These measures are seen as the basis for establishing a firm foundation of diversifying energy

¹¹ Country Programme Action Plan (CPAP 2015 to 2018, page 9.

¹²<http://en.grupotsk.com/noticias/tsk-se-adjudica-en-kuwait-un-complejo-solar-por-valor-de-362-millones-de-euros>

“The Shagaya Renewable Energy Park, situated in the north of the country, at about 100 km for the capital (Kuwait City) has been designed and developed by the Ministry of Electricity and Water and the Kuwait Institute for Scientific Research (KISR) and will be operating in 2017. In 2030 it will have 2,000 MW of installed capacity and forms a part of the Government’s Plan to produce 15% of its total energy needs by means of renewable energy sources”.

resources in Kuwait and sustainable reduction of energy consumption per capita while increasing energy security, enabling Kuwait to export more oil while domestic consumption is complemented with renewable energy. The efforts are meant to sustain the role played by the oil sector in national development while reducing the burden on energy subsidies as consumption per capita decreases and the economy becomes more energy-efficient without compromising the current standards of living enjoyed in Kuwait.

The Kuwait Annual Energy Outlook project is part of larger efforts to intensify energy conservation actions and contribute to those that are already set in motion aimed at supplying 15% of energy from renewables by 2030 as per the commitment of His Highness the Emir during the 2012 Conference of the Parties 18 held in Doha. The project aims at strengthening institutional capacity and intensify the campaign to conserve energy through a combination of policy, regulatory and fiscal incentives. As a background, the Emir Shaikh Sabah Al-Ahmad Al-Sabah speaking at United Nations climate talks in Doha, announced on the 4th of December 2012 that Kuwait was seeking to produce 15% of its energy from renewables, such as solar and wind by 2030¹³. The announcement set the stage for accelerating the momentum that had already started before the announcement of installing renewable energy systems in Kuwait. According to the International Renewable Energy Agency (IRENA), Oil accounted for two-thirds of Kuwait's primary energy supply in 2009, up from about 58 percent at the beginning of the decade. Natural gas made up almost all the rest. The goal of reaching 15% by 2030 is achievable, especially, if among other projects, the planned solar energy plant in Shagaya (phase one to three) is completed and the on-going installation of solar panels in public buildings continue.

A National Energy Outlook is a needed tool that provides clear data sets and future scenarios paves way of evidence-based planning and integration of sustainable energy in the implementation strategy and framework of the Kuwait Nation Development Plan allowing for clear road map with milestones for reaching the 2030 goal. Already, the government has mobilized MEW to start a number of projects aimed at installing renewable energy and also has initiated programmes supporting energy efficiency nationally. It is not starting from scratch, for instance, at the time of the announcement, IRENA estimated that Kuwait had 70 megawatts of renewable projects, including 10 megawatts of photovoltaics, 50 megawatts of concentrated solar power and 10 megawatts of wind. Currently, plans and projects are in place to increase the figures drastically to 2000 megawatts by 2030 based on the on-going projects and those in the pipeline. It is important to note that among the ongoing initiatives, the renewable energy plan to produce 70 MW has already been initiated and is incubated in KISR.

Kuwait has identified in its INDC¹⁴ priority actions for GHG¹⁵ reduction mainly concentrated in the energy sector. It has also recognized a series of existing barriers and actions that need to be addressed for the mitigation technologies to be adopted, which includes but not limited to: "engaging key stakeholders in government and the private sector; reforming/strengthening policies and measures; fostering the adoption of emerging technologies, developing market-based technology support systems; and strengthening technical capacity and education"¹⁶.

An important part of dealing with sustainable energy and development challenge in Kuwait is linked to awareness and advocacy actions for energy and resource conservation. Kuwait has a well-

¹³ Kuwait news Agency (KUNA) <https://www.kuna.net.kw/ArticlePrintPage.aspx?id=2474810&language=en>

¹⁴ Intended Nationally Determined Contributions (INDCs) are part of the new international climate agreement reached by the U.N. Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP21) in Paris in December 2015 where countries across the globe committed to implement.

¹⁵ Green House Gases (GHGs) are gases that cause global warming. Carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons and perfluorocarbons are the main greenhouse gases caused by human activity.

¹⁶ Kuwait INDC report 2015

developed human resource infrastructure for national environmental education programme reflecting a national commitment that could be strengthened to increase understanding of energy and development challenges in Kuwait and foster a sense of individual and collective responsibility towards addressing it.

Given the growing leadership role of Kuwait in fostering development cooperation, the development of the Kuwait National Energy Outlook (KNEO) project work will engage closely with the League of Arab States and its affiliate the Regional Centre for Renewable Energy and Energy Efficiency (RCREEE), other GCC energy research centres in the development of energy efficiency and renewable energy data sets and indicators and will seek to partner in future with the International Energy Agency's World Energy Outlook (WEO) to benefit from its experiences in energy data processing and forecasting future scenarios.

The development and preparation of the Kuwait National Energy Outlook will be carried out by KISR. KISR will seek to partner with other Government agencies and UNDP. It will also engage regionally with the United Nations Environment Programme (UNEP), which is a non-resident agency of the UNCT in Kuwait, to benefit from their technical expertise. The project will partner with stakeholders from, the civil society, academic community, and the private sector to engage in a multi-sectoral dialogue and consensus while building the needed data sets for the development of KNEO that will be beneficial to integrating sustainable energy in the Kuwait National Development Plan and address the energy challenges in Kuwait. The project team will utilize and verify previous efforts in formulating a national energy policy including but not limited to *The Future of Kuwait's Energy System: Mitigating Threats and Seizing Opportunities -White Paper on a Sustainable National Energy Strategy, 2017* and *Development of a Strategy for the Exploitation of Renewable Energy Resources for the State of Kuwait, 2012*. These previous KISR studies formulated the baseline in setting up national energy targets such as the 15% renewable energy contribution to the national energy requirements by 2030 and the need for an evidenced-based policy that utilizes a periodical national energy outlook.

II. RESULTS AND PARTNERSHIPS

Expected Results

GOAL OF THE PROJECT

To strengthen the institutional capacity of KISR to assist in diversifying Kuwait's energy resources and achieve its 2030 energy vision of increasing energy supply from renewables to 15% and reduce energy usage per capita through energy efficiency measures

OUTCOMES

The project has one outcome:

OUTCOME 1

Strengthened capacity for Kuwait Institute of Science and Research (KISR) to support evidence-based sustainable energy policy development and planning through annual production of Kuwait National Energy Outlook (KNEO).

OUTPUTS

The outcome is supported by two specific outputs.

OUTPUT 1.1: Annual production of Kuwait National Energy Outlook (KNEO) report initiated.

A process to initiate an annual production of the Kuwait National Energy Outlook is seen as an important step towards generating, processing and managing data, codifying information and figures for evidence-based planning, capacity development and tracking progress. Progress will be tracked to assess achievement of national development milestones related to general energy planning and development including renewable energy and energy efficiency.

Specific activities to initiate the annual Kuwait National Energy Outlook (KNEO) based on international practices include:

- Establishment of editorial and production committees
- Establishment of data collection and processing protocols
- Agreement on baseline establishment, indicators, and development of scenarios for renewable energy and energy efficiency in Kuwait.
- Setting up of a working relationships, partnerships/collaboration for shared expertise with regional and international agencies e.g. with Organisation for Economic Cooperation and Development (OECD)'s International Energy Agency (World Energy Outlook), with the League of Arab States affiliated Regional Centre for Renewable Energy and Energy Efficiency (RECREEE) who produce the Arab Future Energy Index (AFEX), Research centres based in Gulf Cooperation Council (GCC) countries on renewable energy and energy efficiency assessment guidance and methodology.
- Scheduling/annual calendar of events for writing, producing and publishing the report.
- Data collection, analysis, processing and report writing including white papers linked to KNEO. Production and publishing of Kuwait national Energy Outlook report based on processed data.
- Planning for annual launch events within the country, promotion and advocacy of KNEO including production of KNEO summary policy briefs for policy makers.

OUTPUT 1.2: Institutional Capacity Development for KISR strengthened.

Strengthening of the institutional capacity of KISR to effectively and annually produce the KNEO is a critical element of developing capacity for evidence-based development and planning in Kuwait. Current capacity will be strengthened through addressing capacity gaps.

Specific activities to support institutional capacity development:

- Identification of existing gaps in institutional capacity and assessment of capacity needs for KISR to effectively initiate a platform for the annual production of KNEO. Preliminary analysis of such gaps include strengthening capacity in: - data collection, processing and development protocols, development of energy indicators, scenarios forecasting, data analysis and publishing of policy briefs to support evidence-based development and planning,
- Facilitation of North-South, South-South and triangular cooperation on energy data processing and documentation. Building on the trained personnel of KISR, specific and targeted exchange of ideas, knowledge and experiences with/from other agencies such as OECD International Energy Agency World Energy Outlook is one way of strengthening the capacity in KISR. For instance, there is need for initiating targeted training programmes for forecasting future scenarios annually based on on-going energy research and development activities at KISR.
- Institutional capacity for structured production, advocacy and presentations of energy policy briefs based on KNEO and for linking the outcomes of each KNEO to the Policy Centre at GSSCPD for immediate or future evidence –based planning and development under the Kuwait National Development Plan.

Partnerships

The project will be managed by UNDP and implemented by KISR on behalf of the Government and supported by UNDP in partnership with GSSCPD. Other Ministries that will play specific roles in data collection or related to the production of KNEO include: MEW, Environmental Protection Agency, and Public Authority for Housing Welfare, Ministry of Education, and the oil sector. At UNCT level, partnership will be built with UNEP.

Stakeholder Engagement

The project will work with KISR to engage with related Government ministries and institutions, the private sector, civil society, academia and research institutions to achieve its outcomes.

South-South and Triangular Cooperation (SSC/TrC)

The project will engage with Kuwait Government development partners within the framework of North-South, south-south and triangular cooperation to build institutional capacity in Kuwait for energy data processing and documentation through exchange of ideas, knowledge and experience. Specific and targeted exchange of ideas to share and gain knowledge and experiences with/from other countries will be one way of strengthening the capacity of KISR.

Sustainability and Scaling Up

The annual Kuwait National Energy Outlook will provide an important feature of forecasting scenarios relevant for evidence-based planning and development as a way of integrating sustainable energy road map for sustainability and scaling up in the implementation of the Kuwait National Development plan. In addition, the production of annual KNEO will contribute to building the institutional capacity of the statistics and data collection office to ensure sustainability of evidence-based energy planning and development in the country. The annual production of the report will be a powerful instrument for evidence-based planning and development and a platform for achieving

intra-generational and inter-generational energy conservation consciousness in the Kuwait society in the long term.

As a major Knowledge product, the annual Kuwait National Energy Outlook, and its related white papers will become discrete awareness and advocacy knowledge products to achieve the objectives of energy conservation benefiting the whole of Kuwait economy.

III. PROJECT AND RISK MANAGEMENT

Risk Management

Kuwait's economy heavily depends on the oil sector and the volatility global oil prices are a threat to the revenue collected by the Government on annual basis. Reduction in funding required for project implementation is a risk. Any decrease in revenues due to future fall in oil prices could lead to austerity plans, and major cuts in public spending. If the pressure on the government budget, it could lead to an unlikely situation of decreased funding for the UNDP Country Programme. Additionally, with reduced government revenues, investments in renewable energy and energy efficiency measures could be delayed or slowed down. There is an assumption that because of the same reasons, there will be incentives on the side of the Government in the short-term to apply energy conservation measures that will reduce energy consumption per capita and encourage acceleration of installation of renewable energy in the Kuwait economy. The KNEO is one tool of achieving this objective. The risks will be mitigated by ensuring that the evidence-based planning exercise supported by the Kuwait Energy Outlook report will be prioritised to act as a stimulus to implementing the annual production of KNEO.

Cost Efficiency and Effectiveness

The project will work closely with the other projects implemented under the 2015-2018 Country Programme to maximise synergies and improve the effectiveness of its actions. The project will draw the necessary international and regional expertise and best practices of UNDP that will increase cost-efficiency while facilitating timely delivery of Kuwait National Energy Outlook.

As part of capacity building of the project and with the aim of improving cost effectiveness, the project will bring the experiences of UNDP to bear in implementing the Post-2015 Sustainable Development Goals (SDGs) number seven on energy, and thirteen on climate as an integrated programme rather than discrete sustainable development priorities. For instance, experiences could be shared from UNDP as a global partner in the production of the Sustainable Energy for All Global Tracking Framework (GTF) hosted by the World Bank and includes among other partners, the OECD's International Energy Agency the producers of the annual World Energy Outlook (WEO).

Project Management

The project will be nationally executed under the overall coordination of the GSSCPD. KISR will be implementing the project and will be involved in the management of the project activities for it to achieve its objectives. Government Ministries/Authorities/Offices (including GSSCPD), Academic Institutions, NGOs, and UN agencies (including UNDP) will implement the programme activities as Implementing Partners.

KISR will be directly responsible for the Government of Kuwait's participation in project. Annual Work Plans (AWPs) for specific outputs of the project will be prepared. UNDP will sign the project document with GSSCPD and KISR as the implementing partner in accordance with corporate practices and local requirements.

IV. RESULTS AND RESOURCES FRAMEWORK

Intended Outcome as stated in the UNDAF/Country Programme Results and Resource Framework:

Outcome 1: Policy and regulatory economic, social and environmental frameworks are in place to build resilience for inclusive, sustainable growth and development.

Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:

1. Ease of doing business index ranking improved

Baseline: 104 (World Bank 2013)

Target: 103

2. Number of new business licenses approved for Small and Medium-sized Enterprises disaggregated by gender, age, and governorates

Baseline: None

Target: 300

3. Percent increase of public expenditure on health promotion, higher education and social welfare, and coverage of the social protection system, disaggregated by gender, age, and governorates

Baseline: Health 6.60% in 2011/2010, Education 10.07% in 2011/2010, Social security and welfare affairs 15.28% in 2011/2010

Target: to be determined by the respective government entities

4. Number of beneficiaries, disaggregated by gender, age and governorates, benefiting from improved water management systems

Baseline: Brackish water net consumption, 2011: 19,265 million gallons; potable water net consumption, 2011: 128,026 million gallons

Target: Brackish water net consumption 16,000 million gallons; potable water net consumption 125,000 million gallons (by 2018)

Applicable Output(s) from 2014-17 Strategic Plan:

Output 1.5. Inclusive and sustainable solutions adopted to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy)

Project title and ID : Kuwait Annual National Energy Outlook ID: 00091765

OUTPUTS AND TOC	OUTPUT INDICATORS ¹⁷	ACTIVITIES, RISKS AND ASSUMPTIONS	ROLE OF PARTNERS	INPUTS
<p>Output 1 Annual Kuwait National Energy Outlook (KNEO) report initiated</p> <p><i>Indicator:</i> Annual production of a national energy outlook report. <i>Baseline:</i> 0 – no existing annual national energy outlook report. <i>Target:</i> Publication of a national energy outlook report every year from 2018.</p>	<p>Results Indicator 1.1</p> <p><i>Indicators:</i></p> <ul style="list-style-type: none"> • A functioning KNEO editorial board in place, • KNEO published annually and disseminated nationally. <p><i>Data Source:</i> KISR, Central Statistics Bureau and MEW</p> <p><i>Frequency:</i> Annual</p> <p><i>Baseline (year):</i> 2017</p> <p><i>Target (year):</i> 2018</p>	<p>1.1 Establishment of editorial and production committees, data collection, data analysis, baselines, indicators, processing protocols and development of scenarios.</p> <p>1.2 Regional and international partnerships.</p> <p>1.3 Data analysis, scenarios building, writing, production and publication of the report.</p> <p>1.4 Annual launch events within the country, promotion and advocacy nationally and regionally</p> <p>It is assumed that the publication of Kuwait National Energy Outlook will become part and parcel of the statistical office with KISR. The key risks is budget constraints associated with reduced Government revenues to sustain its production in future</p>	<p>Achieve the outputs.</p> <p>KISR will be the core implementer for the evidence-based planning process. UNDP including Regional Team to support institutional capacity development.</p> <p>The private sector, civil society organisations and the Media will be involved in consultations of the development, publication and launch of the reports. Academic institutions will be involved in writing of white papers on the topic.</p>	<p>\$ 700,000</p> <p>Monitoring Costs: \$ 5,000</p>
<p>Output 2 Institutional capacity of KISR for production of KNEO strengthened</p> <p><i>Indicator:</i> Number of KISR staff benefited from capacity development, exchange visits and training.</p>	<p>Results Indicator 2.1</p> <p><i>Indicator:</i></p> <ul style="list-style-type: none"> • Number of people who have benefited in capacity development activities. • Number of exchange visits completed. 	<p>2.1 Institutional capacity assessment process initiated</p> <p>2.2 Facilitation of exchange of lessons and Knowledge with OECD's IEA World Energy Outlook.</p> <p>2.3 Institutional capacity building activities for structured production, advocacy and presentations and for linking KNEO to Policy Centre at GSSPD.</p> <p>It is assumed that capacity development</p>	<p>KISR will have the following roles:</p> <ul style="list-style-type: none"> -Identification of training needs and partners. -Custodian to the capacity assessment process -Selection of staff for exchange visits and training. -Implementation of programme activities. 	<p>\$ 143,000</p> <p>Monitoring Costs: \$ 5,000</p>

¹⁷ It is recommended that projects use output indicators from the Strategic Plan, as relevant, in addition to project-specific results indicators

<p><i>Baseline:</i> Existing capacity development activities at KISR</p> <p><i>Target:</i> 10 people benefit from capacity development programme activities.</p>	<p><i>Data Source:</i> KISR</p> <p><i>Frequency:</i> Annual</p> <p><i>Baseline (year):</i> 2017</p> <p><i>Target (year):</i> 2017</p>	<p>activities will become part of the functional roles of the KISR for annual production of KNEO to ensure sustainable capacity in the country. The major risk is budget constraints associated with reduced Government revenues to sustain such programmes in future</p>	<p>UNDP including Regional Team to support institutional capacity development.</p>	
<p>Evaluation</p>				<p>Evaluation of project \$20,000</p>
<p>GMS 3%</p>				<p>27,000</p>
<p>Total Budget</p>				<p>900,000</p>

V. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following:

Within the annual cycle

Track Progress. Following the frequency cited in the monitoring plan, progress data against the results indicators will be collected and analysed to assess the progress of the project in achieving the agreed outputs. National data sources should be used whenever possible. Slower than expected progress will be addressed by the project management. Beneficiary feedback will be part of regular data collection and performance assessment.

Monitor and Manage Risk. Based on the initial risk analysis submitted (see annex 2), a risk log shall be actively maintained, including by reviewing the external environment that may affect the project implementation. Risk management actions will be identified and monitored using a risk log. This includes monitoring social and environmental management measures and plans that may have been required as per UNDP's Social and Environmental Standards (see annex 3). Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.

Evaluate and Learn. Evaluations shall be conducted in accordance with the evaluation plan. Knowledge, good practices and lessons should be captured and shared, as well as actively sourced from other projects and partners, and integrated back into the project. If a project evaluation is required (e.g., when mandated by partnership principles, or due to the complexity or innovative aspects of the project), it should be conducted in accordance with the project's evaluation plan.

Review and Make Course Corrections. The project management will review the data and evidence collected (through all of the above) on a regular basis within the annual cycle, and make course corrections as needed. The frequency of review depends on the needs of the project, but an internal review of the available progress data against the results indicators is required at least quarterly. Any significant course corrections that require a decision by the Project Board should be raised at the next Project Board meeting.

Annually

Annual Project Quality Rating. On an annual basis and at the end of the project, the quality of the project will be rated by the QA Assessor against the quality criteria identified in UNDP's Project Quality Assurance System. Any quality concerns flagged by the process must be addressed by project management.

Annual Project Review and Report. The Project Board shall hold a project review at least once per year to assess the performance of the project and appraise the Annual Work Plan for the following year. An annual report will be presented to the Project Board for the review, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk log with mitigation measures, and any evaluation or review reports prepared over the period. Any quality concerns or slower than expected progress should be discussed by the project and management actions agreed to address the issues identified. This review is driven by the Project Board and may involve other stakeholders as required.

Closure

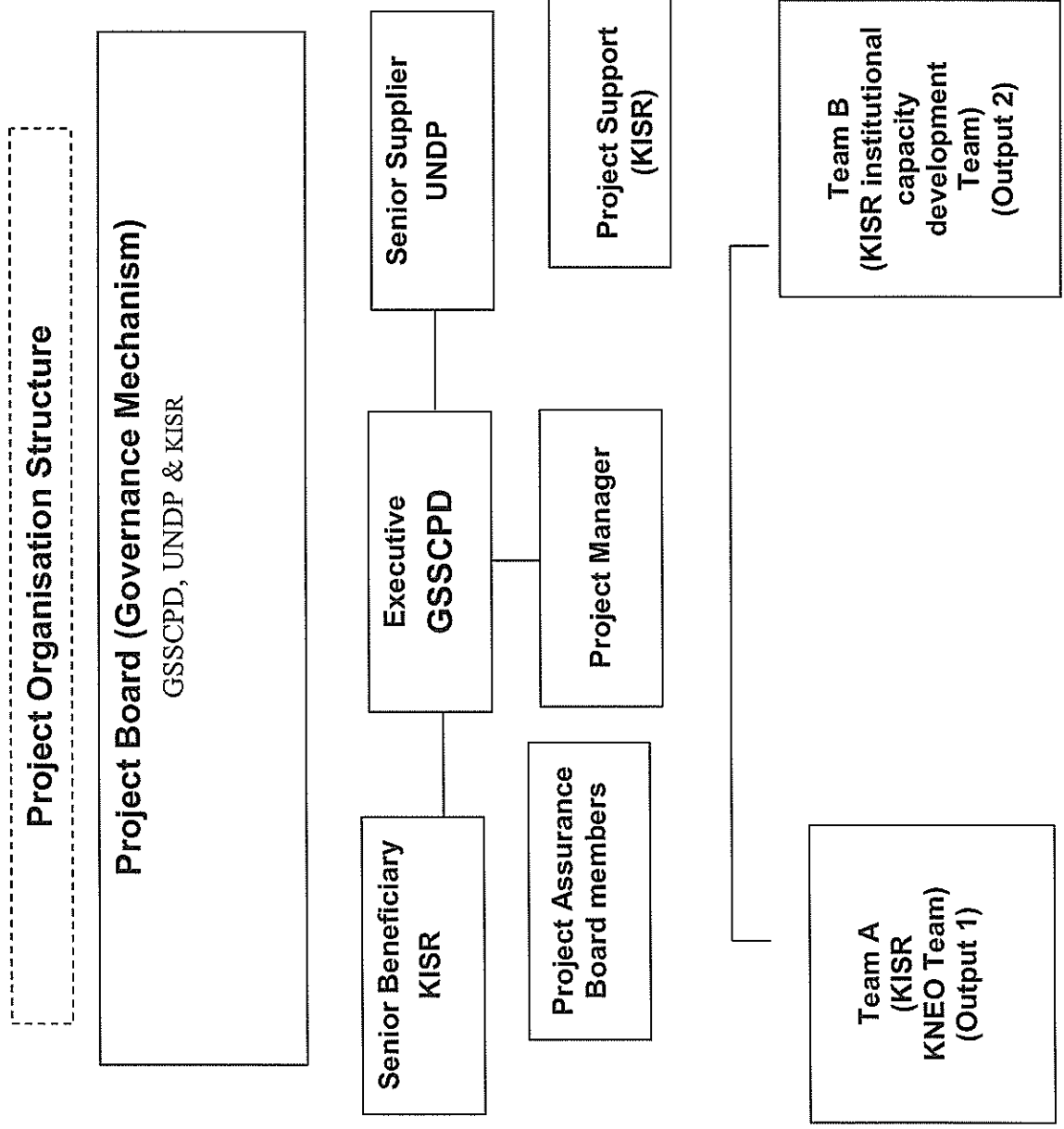
In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up.

VI. MULTI-YEAR WORK PLAN

EXPECTED OUTPUTS and	PLANNED ACTIVITIES	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET			
		Y1 August 2017 – July 2018	Y2 August 2018 – December 2018	Q1	Q2		Q3	Q4	Funding Source	Budget Description
Output 1 <i>Result indicator</i> Annual Kuwait National Energy Outlook (KNEO) report produced. Baseline (year): 2016 0 - no existing annual national energy outlook report	1.1 Establishment of editorial and production committees,	xx						GSSCPD		\$240,000
	1.1.1 data collection and indicators formulation		xx	xx				GSSCPD	International consultants	
	1.1.2 formulation of baselines		xx	xx	xx	xx		GSSCPD	National consultants	
	1.1.3 development of processing protocols and scenarios		xx	xx				GSSCPD	Workshops and meeting costs	
	1.1.4 Recruitment of consultant to carry out activities 1.11, 1.12, and 1.13	xx						GSSCPD		
<i>Targets</i> Y1: establishment of an editorial committee. Y2 : Draft KNEO report produced	1.15 Recruitment of project coordinator	XX	XX					GSSCPD	National project coordinator	\$100,000

Y2, Publication and launch of first KNEO.	1.2 Engagement with regional and international partners.	xx	xx	xx	xx	KISR	GSSCPD	Consultants Travel Workshops	\$55,000
	1.3 Data management platform development	xx						International consultants National consultants Workshops and meeting costs	\$145,000
	1.31 data analysis, scenarios forecasting, processing			xx	xx	KISR	GSSCPD	UNDP Regional advisory support for TOR development on mapping data management need, assessments of gaps in data availability, peer review of drafts and process quality support activities.	\$55,000
	1.4 Annual launch events within the country, dissemination, promotion and national and regional advocacy				xx	KISR UNDP	GSSCPD	Workshop costs Travel Publication costs	\$100,000
	MONITORING				xxxx	KISR	GSSCPD	Reports	\$5,000
	2.1 Institutional capacity assessment process initiated	xx	xx			KISR	GSSCPD	Consultants Workshop, and meeting costs	\$120,000

VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS



Roles and responsibilities

The project is funded by Government of Kuwait through GSSCPD and has a role to ensure that it is contributing to the Kuwait National Development Plan priorities. GSSCPD will therefore have the role of overall project guidance and assurance. It will also play the role of chairing the project board. The UN Resident Coordinator will oversee the timely implementation of the project and ensure that it will meet its obligations as per the Country Programme Action Plan. The UN Deputy Resident Representative will manage the day to day activities of the project. The KISR will be the core implementer of KNEO project. It will produce the annual Kuwait Nation Energy Outlook report while overseeing the implementation of the capacity development components of the project to ensure sustainability and that linkages are made with the policy centre for the evidence-based planning process. KISR will provide the necessary support for the technical and scientific aspects of the project. It will coordinate the activities with GSSCPD and other relevant Government departments or ministries. GSSCPD will oversee the successful conduction of a mid-term and final evaluation in coordination with UNDP and KISR. UNDP will provide the needed technical advisory support to the project through its Regional Hub for Arab States on cost recovery basis. Through the board, the KISR and UNDP will ensure the involvement of project beneficiaries and stakeholders in the implementation of the project. It will also ensure that the UN Country Teams work together for the benefit of the project. Stakeholder consultation meetings and conferences for advocacy will be held in respective project activities.

Evaluation Plan¹⁸

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
Project Mid-Term Evaluation	KISR	4.2	2	April 2018	KISR, UNDP, GSSCPD	budget \$10,000
Project Final Evaluation	KISR	4.2	2	December 2018	KISR UNDP, GSSCPD	budget \$10,000

¹⁸ Optional, if needed

VIII. LEGAL CONTEXT

This document together with the CPAP signed by the Government and UNDP which is incorporated by reference, constitute together the instrument envisaged and defined in the [Supplemental Provisions](#) to the Project attached hereto and forming an integral part hereof, as “the Project Document”

Consistent with the above Supplemental Provisions, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) Assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document [and the Project Cooperation Agreement between UNDP and the Implementing Partner]^[1].

The Implementing Partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document.

^[1] Use bracketed text only when IP is an NGO/IGO

IX. ANNEXES

Responsibilities of the QA Assessor and the QA Approver	Project QA Responsibility
<p>QA Assessor UNDP staff responsible for project QA, who is not the project manager or part of the project team (at the CO level, this person is typically a Program Officer responsible for QA of the project)</p>	<p>- Conduct the project QA assessment, in consultation with relevant expertise as necessary. Inputs can include members of the Project Board, individuals providing project assurance, and other stakeholders. - Complete the project QA report</p>
<p>QA Approver This role must be separate from the QA assessor, functioning at a higher level of accountability for the project (At the CO level, typically the DRR, CD, DCD, or Head of Portfolio).</p>	<p>- Review the project QA report for completeness, comprehensiveness, and accuracy with additional support personnel as appropriate. - Adjust and approve the final project QA report as necessary in review with the QA Assessor, including follow up management actions.</p>

1. Project Quality Assurance Report

Program QA standards and rating tool – will be congruent with Project QA.

Roles and Responsibilities

2. Social and Environmental Screening Template for projects \$500,000 or more [English][French][Spanish], including additional Social and Environmental Assessments or Management Plans as relevant.

To be completed by the beginning of the project if needed.

3. Capacity Assessment: Results of capacity assessments of Implementing Partner (including HACT Micro Assessment)

To be completed by the beginning of the project if needed.

4. The project’s first year detailed Annual Work Plan (AWP)

To be completed by the beginning of the project

Risk Analysis. Use the standard Risk Log template. Please refer to the Deliverable Description of the Risk Log for instructions

Annex II: Risk Analysis

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Change in Government priorities due to prevailing levels of revenue collection from oil and gas resources	2017	Fiscal /Political	4	re-alignment of project implementation strategy to keep relevant and focus on medium and long-term priorities rather than short-term and urgent needs	Programme manager	Project formulation mission	2017	no change
2	Difficulty in hiring qualified people and or building the needed capacity on time.	2017	Operational	3	The project can draw on a pool of national and international experts. Proper preparation of Terms of Reference and contracts should help minimizing delay due to this cause. Capacity assessment and building will be ensured to ensure effective project implementation.	Programme manager	Project formulation team	2017	no change
3	Inadequate coordination with stakeholders within energy related agencies /Ministries for data collection.	2017	Strategic	1	This risk will be mitigated by building on the establishment of editorial committees and multi-stakeholder consultations within Government departments/ministries during the planning and implementation of the project. Commitment from all stakeholders will be maintained through effective coordination and communication between Stakeholders and relevant line agencies.	Programme manager	Project formulation team	2017	no change

Project Board Terms of Reference and TORs of key management positions

Annex VI: Project Board Terms of Reference and (TORs) of key management positions

Draft Terms of References Project Manager (Full-time)

Project Title & Number:	Kuwait Sustainable Energy Project
Post Title:	Project Manager
Duty Station:	Kuwait
Duration of initial contract:	xxxxx
Duration of project:	xxxxx
Type of contract:	Service Contract
Contract Level:	xxx

BACKGROUND/ORGANIZATION CONTEXT:

Kuwait has an ambitious plan to diversify its energy resources and reduce consumption of energy per capita within the period leading to 2030. The Sustainable Energy Project will aim to lay the foundation for actions to achieve this goal and requires an effective and coordinated approach across the Kuwait society. The prevailing low oil prices which results in low Government revenues from the oil and gas call for the diversification of the economic sector and also increased energy efficiency. However, oil prices rise and fall in a cyclic way affecting the economy either positively or negatively. The greatest challenge is when the prices fall at a time when Kuwait economy and population are growing creating pressure on Government revenues. One way of dealing with the cyclic nature of revenue flows is to diversify the Kuwait energy sources through increased use of renewable energy while reducing energy consumption per capita. Doing so will free more oil and gas for export from domestic use contributing to government revenue.

The project is designed to address the challenge by establishing and developing a framework for the production of the annual Kuwait National Energy Outlook and strengthening the institutional capacity in the country for evidence-based planning and development. The framework will strengthen the ability of Kuwait to increase the share of renewable energy in the energy mix and the ability of increase the rate of energy efficiency by reducing energy consumption per capita in the Kuwait economy. It will achieve this by strengthening the capacity for evidence-based sustainable energy policy development and planning and linking energy considerations in the Kuwait national Development Plan and supporting the objectives of the policy centre.

DUTIES AND RESPONSIBILITIES:

A) Summary of Key Functions:

1. Ensures the Implementation of the Project Goals & delivery of all aspects of the project;
2. Day-to-day implementation and management of the project by maintaining a log of the delivery of appropriate technical, operational, financial and administrative outputs and tracking the progress of the project by monitoring and reporting
3. Provide timely advisory services on policy and programming matters related to the project to the Government and relevant ministries, local partners and institutions and other stakeholders, and also ensure facilitation of knowledge building and sharing among partners;

4. Ensure creation of strategic partnership and support effective resource utilization and mobilization for the project.
5. Provide effective guidance to stakeholders on ways to ensure the project mainstreams gender considerations in its implementation.

B) Specific tasks and responsibilities:

1. Ensures the Implementation of the Project Goals & delivery of all aspects of the project:

Coordinate, systemize, codify and integrate successful approaches, methodologies and tools developed in the relevant area, into a cohesive UNDP framework for supporting government's efforts of production of the Kuwait National Energy Outlook (KNEO);

2. Day-to-day implementation and management of the project by maintaining a log of the delivery of appropriate technical, operational, financial and administrative outputs and tracking the progress of the project by monitoring and reporting

- Managing and coordinating the activities of project implementation based on relevant Project Document and related proposals, including the supervision and guidance of the Project Staff, short, medium and long-term consultants, with a view to achieving project results;
- Responsible for the development of comprehensive/detailed Project work-plan including structured dynamics of all Project activities, role and responsibilities of the stakeholders and milestones;
- Monitor progress and implementation of comprehensive/detailed project work plans and key event schedules comprising planned activities, responsibilities and deadlines relating to all active participants in the project;
- Mobilize goods and services to initiative activities, including drafting TORs and work specification;
- Monitor financial resources and accounting to ensure accuracy and reliability of financial reports;
- Manage and monitor the project risks initially identified, submit new risks to the Project Board for consideration and decision on possible action if required; update the status of these risks by maintaining the Project Risk Log;
- Ensures the existence of successful quality assurance for the project's financial, procurement and administrative processes in order to make sure that they are conducted in line with prevailing UNDP rules and regulations as well as in line with the project timelines;
- Prepare the Progress Report (progress against planned activities, update on Risks issues, expenditures) and submit the report to the Project Board and Project Assurance;
- Prepare the Annual review Report, and submit the report to the Project Board and the Outcome Board;
- Perform tasks in ATLAS in line with given function;

3. Provide timely advisory services on policy and programming matters related to the project to the Government and relevant ministries, local partners and institutions and other stakeholders, and also ensure facilitation of knowledge building and sharing among partners:

- Identification of sources of information related to policy-driven issues. Identification and synthesis of best practices and lessons learnt into project goals;
- Support the development or strengthening of policies that will address the sustainable energy problems and needs in collaboration with the Government and other strategic partners.

- Share relevant and substantive and operational experiences with other colleagues and counterparts; (Develop knowledge products based on the project outcomes to be shared with the Project partners).
4. **Ensure creation of strategic partnership and support effective resource utilization and mobilization** for the project
- Develops strong relationships with the implementing partners;
 - Establishing effective linkages with other UNDP projects and with other initiatives in the sector with a view to developing substantive partnerships and generating synergies.
 - Analysis and research of information on donors, preparation of substantive briefs on possible areas of cooperation, identification of opportunities for initiation of new projects, recommend approaches to donors in terms of resource mobilization.
5. **Provide effective guidance to stakeholders** on ways to ensure the project mainstreams gender considerations in its implementation:
- Ensures gender is effectively mainstreamed throughout the project activities, work plans, budgets, reports, researches, analyses and, where specifically relevant, analyzed in detail;
 - Ensure gender equality is mainstreamed throughout team, consultant and staff management activities;
 - Ensures knowledge on gender equality is incorporated in Project Knowledge management activities and products.

PERFORMANCE INDICATORS FOR EVALUATION OF RESULTS:

- Project activities executed in line with UNDP corporate principles (RBM, Prince2);
- Project team(s) effectively and efficiently guided and backstopped;
- New partnership with relevant national and international institutions (incl. UN agencies, and international organizations) promoted;
- Enabling legal and policy environment improved;
- Institutional and individual capacity to raise management cost-effectiveness in relevant institutions strengthened;
- Delivered funds in accordance to the planned Annual Work Plan;
- Timely and qualitative reporting in line with the Programme needs and Country Office/National partners requirements.

COMPETENCIES AND QUALIFICATIONS:

A) Corporate Competencies:

- Integrity: Demonstrates commitment to UNDP's mission, vision and values.
- Respect of diversity: Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability; Treats all people fairly without favouritism.
- Client Orientation: Focuses on impact and result for the client and responds positively to feedback

- Team Work: Participates in teams effectively and shows conflict resolution skills
- Relationship Building: Builds strong relationships with clients and external actors
- Stress Management: Remains calm, in control and good humored even under pressure
- Demonstrates openness to change and ability to manage complexities

B) Functional Competencies

Development and Operational Effectiveness: Ability to participate in strategic planning, results-based management, monitoring and reporting; Ability to contribute in formulation, implementation, monitoring and evaluation of development programmes;

Judgment/Decision Making: identifies key issues in a complex situation and proposes course of action for overcoming of the issues.

C) Technical Competencies

Experience in implementing/managing energy, sustainable energy, environment and/or related projects

Experience in Managing Project work plans and budgets

D) Education:

Master's degree in energy, sustainable energy, natural resources management environmental or other related field.

E) Professional experience:

At least 7 years of relevant professional project management experience preferably on similar projects;

Previous experience in implementing energy, sustainable energy or environmental or related projects would be an asset;

Experience in building partnerships in project implementation and building teams among stakeholders including government officials, scientific institutions, NGOs and private sector;

Experience in performing capacity building and training needs assessments, evaluations, monitoring, tracking progress in project implementation and knowledge management.

Previous experience in the UN system and cooperation is a strong asset.

Excellent computer literacy (MS Office; Windows XP, Internet); excellent communications, report writing and analytical skills.

F) Language Requirements:

Language proficiency in both written and oral English and Arabic is required.