



This action is funded by the European Union

ANNEX

of the Commission Implementing Decision on the financing of the special measure part 1 in favour of Iraq for "Support to the energy sector reform" for 2018

Action Document for "Support to the energy sector reform in Iraq"

INFORMATION FOR POTENTIAL GRANT APPLICANTS

WORK PROGRAMME FOR GRANTS

This document constitutes the work programme for grants in the sense of Article 110(2) of the Financial Regulation in the following sections concerning calls for proposals: 5.3.1.

1. Title/basic act/ CRIS number	Support to the energy sector reform in Iraq CRIS number: MIDEAST/2018/041-106	
2. Zone benefiting from the action/location	Iraq The action shall be carried out at the following location: Country-wide	
3. Programming document	EU-Iraq Multiannual Indicative Programme 2014-2017 ¹	
4. Sector of concentration/ thematic area	Energy	DEV. Aid: YES ²
5. Amounts concerned	Total estimated cost: EUR 14 000 000 Total amount of EU budget contribution EUR 14 000 000	
6. Aid modality(ies) and implementation modality(ies)	Project Modality: Direct management (grants - call for proposals) Direct management (procurement of services) Indirect management with the World Bank	
7 a) DAC code(s)	15111	
b) Main Delivery	44001- World Bank	

¹ Commission Decision on the adoption of the National Indicative Programme between the European Union and Iraq C(2014) 5777 final of 18.08.2014

² Official Development Aid is administered with the promotion of the economic development and welfare of developing countries as its main objective.

Channel				
8. Markers (from CRIS DAC form)	General policy objective	Not targeted	Significant objective	Main objective
	Participation development/good governance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Aid to environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Gender equality (including Women In Development)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Trade Development	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Reproductive, Maternal, New born and child health	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	RIO Convention markers	Not targeted	Significant objective	Main objective
	Biological diversity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Climate change adaptation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Global Public Goods and Challenges (GPGC) thematic flagships	N/A			
10. SDGs	SDG 7			

SUMMARY

This action will support Government of Iraq's efforts to ensure increased and more reliable energy access for the Iraqi population by focusing on renewable energy, energy efficiency, and reducing gas flaring. This will contribute to enhancing availability of sustainable, promoting affordable energy and limit the environmental impact of hydrocarbon combustion.

Expected outcomes, fully aligned with the national energy sector strategy, entail the introduction of efficiency and fiscal sustainability policies, improved frameworks and environment for private sector participation and investment, the establishment of a gas policy, and sector governance. The action, mainly characterised by diagnostic studies, advisory services and assessments, will be led by the World Bank and is fully complimentary to its ongoing technical assistance to the Iraqi Energy and Extractive Industries institutions and to the general commitment to mitigate dangerous climate change³.

The action is in line with the EU Consensus for development⁴ contributing to the overall growth and stability of Iraq. It promotes human development, dignity of people and better management of global public goods by improving access to affordable energy. It also increases protection of the environment by better managing natural resources.

³ Paris climate conference (COP21).

⁴ https://ec.europa.eu/europeaid/sites/devco/files/european-consensus-on-development-final-20170626_en.pdf.

LIST OF ACRONYMS

DMGA – Deputy Minister for Gas Affairs
DPF – Development Policy Financing
GDP - Gross Domestic Product
IFC - International Finance Corporation
IMC - Iraq Inter-Ministerial Gas-to-Power Committee
IMF – International Monetary Fund
INES - Integrated National Energy Strategy
IPPs - Independent Power Producers
ISIS - Islamic State of Iraq and Syria (in Arabic "Da'esh")
JICA - Japan International Cooperation Agency
PSP - Private sector participation
RAS - Reimbursable Advisory Service for Structuring
SDG – Sustainable Development Goals
SOEs - State-owned Enterprises
WB – World Bank

1 CONTEXT

1.1 Sector/Country/Regional context/Thematic area

Iraq has seen its development thwarted by decades of conflict and economic decline, with the crises of oil price decline and ISIS insurgency being the latest expression of deep-rooted structural challenges and fragility. Poverty reduction achieved between 2007 and 2012 has been erased, raising the proportion of population in poverty to 22.5 % and pushing an additional 3 million people below the poverty line. More than 4 million Iraqis have been displaced by the country's various conflicts. While oil prices have recently recovered to some extent, and progress in the fight against ISIS has been made, Iraq's multifaceted fragility leaves it vulnerable to shocks.

The oil and gas sector accounts for over 65 % of gross domestic product (GDP), more than 90 % of central government revenue, and 98 % of the country's exports. Lower oil receipts considerably widened the budget deficit in 2015 and 2016 from an average of 5.8 % of GDP in 2013 and 2014 to 12.3 % and 8.2 % in 2015 and 2016, respectively. Increased oil production and exports in 2016 have slightly increased oil revenue, despite continued low oil prices. Budgetary pressures forced the Government of Iraq to make adjustments to contain the deficit in 2015 and 2016, by ensuring increased volumes of oil exports in favour of security spending, payment of wages, pensions and debt service, investment in services and productive sectors.

With the current crisis, the Government of Iraq is struggling to meet the electricity sector demands, a sector which suffers from key concurrent challenges. Power supply from the public network is only provided on average 14 hours per day, so people have reverted to the using much costlier diesel generators. Iraqi citizens have expressed their concerns through demonstrations during the last peak of electricity outages in July/August 2015, indicating that safeguarding basic electricity service delivery is essential to the country's confidence-building and stability.

Due to inadequate contractual, regulatory and institutional frameworks, more than 60 % of the country's gas production is currently being flared in-field, making Iraq the second largest gas flaring country in the world. Flaring of natural gas contributes to climate change and impacts the environment through the emission of CO₂, black carbon and other pollutants. Moreover, through flaring, a readily available and clean energy resource is wasted, while energy shortages in the country lead consumers to resort to more pollutant energy sources such as diesel and, ironically, to the country to import fuel costing an estimated USD 6-8 billion per year, imposing significant economic and fiscal strain. A better use of existing gas production would thus limit the impact of energy sources on the environment and climate change, generate estimated annual net savings for the Iraqi Treasury of around USD 5 billion, and advance the country's sustainable development. For this to happen, measures to enhance governance in this subsector are required, as well as institutional capacity building efforts.

Decades of state-driven economic policy, a dominant public sector, poor governance, political instability and destruction of private assets and infrastructure have discouraged private sector growth in virtually all sectors of the economy.

1.1.1 Public Policy Assessment and EU Policy Framework

The Government of Iraq is focused on improving service delivery to mitigate the effects of citizen's dissatisfaction and widespread internal displacement, which have derived in increasing social tensions following the security crisis. In April 2013, the Government of Iraq adopted the Integrated National Energy Strategy (INES) 2013-2030 to ensure a multi-pronged approach to secure fuel supply and adequate power generation capacity, reduce losses in the transmission and distribution system, and gradually reduce subsidies with mitigation measures for the most vulnerable and the poor.

In the electricity sector, the INES aims at (i) increasing reliability, efficiency and accountability of electricity service delivery, (ii) reducing the energy sector's fiscal burden, (iii) promoting private sector participation in electricity generation and distribution to fill investment financing and implementation capacity gaps, and (iv) improving the sector management and performance and restructuring the tariff system to progressively move towards full cost-recovery, while ensuring sufficient protection for poor and vulnerable consumers. The Parliament recently passed the electricity law which outlines new key roles for the Ministry of Electricity, and issues such as licensing, restructuring, corporatisation and eventual privatisation of the Ministry's 27 directorates, de facto SOEs.

In the gas sector, the Government of Iraq has shown its commitment to reduce current massive gas flaring by proposing and adopting an institutional, regulatory and contractual framework conducive to an increased private sector participation, as well as by adopting explicit goals and objectives to eliminate routine natural gas flaring by 2030, and increase the allocation of processed domestic natural gas for power generation purposes.

Through this proposed action, the EU confirms its commitment to key areas of the Joint Communication "Elements for an EU strategy for Iraq"⁵. The provision of technical assistance to support a phased and comprehensive reform of the national energy sector

⁵ JOIN(2018) 1 of 8.1.2018, endorsed by the Council on 22.1.2018.

represents a concrete step forward for EU engagement under the EU-Iraq Partnership and Cooperation Agreement to support basic services, economic development, address corruption and complement the dialogue on trade issues.

This action also reaffirms the EU commitment to the EU Global Strategy and the Communication on the EU consensus for development, where the EU and its Member States commit to support neighboring and developing countries efforts for contributing to the human development, dignity of people and better management of global public goods, by improving access to affordable energy and contributing to the overall growth and stability of Iraq.

This action is also in line with the EU strategic commitments on environment and climate change. By tackling the overall governance in the energy sector, by ensuring a more reliable and sustainable energy provision to citizens, by supporting Iraq in expanding renewable energy sources and reducing its CO₂ emissions, the action contributes to the EU commitments as set in the EU Agenda 2030 and the EU 2020 Energy Strategy.

1.1.2 Stakeholder analysis

The Ministry of Electricity will be the direct counterpart for the electricity sub-component. The Iraqi electricity sector structure is that of a state-owned vertically integrated monopoly with responsibilities as policymaker and regulator, as well as for generation, transmission, distribution and retail supply throughout the country (excluding the self-governing Kurdistan Region), system operations, sector planning and project development and implementation. Inadequate capacity, expertise and experience at the Ministry of Electricity, the existing sector structure and the lack of a proper regulatory framework are major constraints to manage the sector and operate efficiently and provide reliable and competitively priced electricity services to customers. There is a need for an overarching policy framework to cover the entire value chain of generation, transmission and distribution/retail including sector reform, and for establishing a supportive regulatory, legal and institutional framework.

Whereas the recently enacted electricity law underscores private sector participation in the transmission and distribution sub-sectors, there is also a need for a strategy to frame the deregulating process that combines short-term practical measures to combat shortages and long-term policies which plan for a stable, reliable electricity supply for Iraqi citizens.

Integrated sector planning remains a challenge as the Ministry of Oil is mandated to deliver all the fuel required for power generation, and the Ministry of Electricity, despite subsidised fuel prices, is not able to meet its fuel payment obligations to the Ministry of Oil.

The Ministry of Oil will be the direct counterpart for the gas component. Current capacity for natural gas governance within the Ministry of Oil is extremely limited. No staff is specifically assigned to natural gas governance as natural gas has traditionally been considered, from an operational and commercial perspective, a marginal by-product of crude production, and natural gas policy has been subordinated to crude national strategies and policies. The training and capacity-building component of this action is designed to build capacity, modernise the sector and establish a cohort of upper

and middle managers that will constitute the core of sector governance and management capacity.

Though the private sector is to some extent already active in these sectors, there is an evident need to enhance the sector's institutional, legal and regulatory framework and its fiscal sustainability so as to reduce some of the sector perceived risks for increased private sector participation.

1.1.3 Priority areas for support/problem analysis

The electricity sector in Iraq suffers from a series of simultaneous and compounding challenges that prevent sufficient revenue generation and sustainability to deliver electricity services and add any value to its consumers. Years of neglect have led to a dilapidated grid infrastructure with low operational efficiency. Effective metering, billing, and commercial management systems are precarious at best. Electricity tariffs only cover about 10 % of the operational cost, leading to serious under investment and deteriorating services. Gas-based power generation plants are not adequately supplied while more than 60 % of produced gas is currently flared in-field. Investment in gas infrastructure and reform of pricing are critical.

These challenges are mainly related to (i) Supply and Transfer Capacity: hampered by poor maintenance, lack of spare parts, fuel supply shortages, low plant efficiencies and degraded electricity transmission and distribution network; (ii) High Electricity network system losses (nearly 70 % of total electricity energy generated); (iii) Poor Revenue Management, due to outdated or malfunctioning meters, widespread theft or unmetered connections, and absence of effective billing and collection systems and procedures (56 % billing collection); (iv) Unsustainable Financial Performance with the absence of cost reflective tariff; (v) lack of appropriate Institutional Set-up, Legal Framework and Technical Capacity inhibiting new investment and efficient service delivery.

With reference to the gas sector, Iraq is the second largest gas flaring country in the world, while suffering from a shortage of natural gas for domestic use. Gas flaring currently represents an annual economic loss approximately equivalent to USD 2.5 billion. The wasted volumes would be sufficient to meet most of Iraq's unmet needs for gas-based power generation and could generate savings to the Iraqi Treasury by limiting the use of expensive (and for some parts imported) diesel, with a cost of USD 6 - 8 billion per year.

No specific legal, institutional or regulatory framework for exploration, production, gathering, processing, transport or marketing of natural gas exists in Iraq at present. The Basra Gas Company (BGC), a joint venture between state-owned South Gas Company (51 %), Royal Dutch Shell (44 %) and Mitsubishi (5 %) is the only processing operation in place to capture, process, and monetise associated natural gas. New investment in gas capture and processing capacity is needed, and SOEs have been unable to do so due to budget restrictions.

2 RISKS AND ASSUMPTIONS

The proposed programme encompasses the provision of advisory services, which, themselves, do not carry significant risks. The impact of these advisory services, however, is affected by the major risks of the country's fragile and conflict-afflicted environment:

Risks	Risk Level	Mitigation
<p>Political. The proposed technical assistance aims to support the Government of Iraq put in place systems, processes, and incentives that will enable sustainability of gas and electricity sector operations, leading to increased private sector participation. The development impact of the support will however hinge on continued strong government leadership and commitment to adopt and build on adopted policy decisions, such as the implementation of regulatory initiatives and concrete investment decisions. Given the fragile coalition government and security concerns, the situation on the ground remains critical and thus warrants a High risk rating.</p>	High	<p>The action is designed to be flexible in order to: (i) provide timely and continued support to counterparts given Iraq's fragile situation, and quickly adapt to the associated frequent change in priority actions/strategic decisions; (ii) assure a sustained engagement to provide a coordinated and overarching support to priority and emerging issues including informing broader sector dialogue. To ensure a strong Government Ownership, the action is aligned with the country's economic development objectives, and focuses on actions that support key priority areas of the Integrated National Energy Strategy.</p>
<p>Sustainability. The sustainability of the support outputs is uncertain given the country's fragile situation (political, security threats and fiscal stress).</p>	High	<p>This is partially mitigated by the mutually reinforcing package of analytical work, technical assistance, policy lending, and assistance from other donors such as the WB's different programmes in the sector, including its Gas Reimbursable Advisory Service (RAS), and Development Policy Financing operations (DPF I, DPF II and expected DPF III), the IMF's Stand By Agreement, and investments by other partners, including the private sector.</p>
<p>Security Risk</p>	High	<p>Should the security situation deteriorate significantly, the team will consider interrupting the action to reassess scope and objectives rather than continuing to work remotely.</p>
<p>Institutional capacity and Implementation risk. The weak institutional capacity poses a risk of lack of interest or comprehension of proposed activities at the technical level to own, lead and undertake the proposed technical assistance (TA) activities and follow-up actions.</p>	Moderate	<p>This risk is mitigated by: (i) capacity building inherent in the proposed TAs/consultancies; (ii) coordination mechanism established with key ministries as contemplated under the WB general budget support (DPF) series; and (iii) strong commitment of the Government of Iraq to ensure successful implementation of activities. This action will support the</p>

Risks	Risk Level	Mitigation
		Government of Iraq to attain existing commitments under the IMF's SBA programme and the World Bank's DPF series.
Cost overruns due to the Iraq Security Risk Premium and lack of interest from many of the qualified experts to work in Iraq	High	The Action cost estimates are based on recent quotes for similar activities in Iraq. To ensure adequate competition, international bidding/selection will be followed where possible.
Stakeholder risk. Given the poor electricity services, there is a risk that there could be resistance to some of the proposed actions, such as increased electricity disconnections for non-payment of the electricity bills.	High	This risk is mitigated by having in place a sector communication strategy and regular consultations, part of which will be supported by this action.

3 LESSONS LEARNT, COMPLEMENTARITY AND CROSS-CUTTING ISSUES

3.1 Lessons learnt

Previous investments in the emergency reconstruction of electricity generation were significantly hampered by a severely weakened institutional environment and ongoing political instability and insecurity. The activities foreseen by the action are specifically designed to be 1) essentially unaffected by oil price fluctuations -and are in fact specifically responsive to the current context of low oil prices and fiscal constraints and to the need for fiscally-sound reform measures-, and (2) focus on the need to gradually establish a stable institutional, legal and contractual framework to attract private capital and the needed. In addition, by implementing key recommendations set out by the WB's previous and ongoing analytical work, the activities will help the Government of Iraq meet its commitments with the WB.

3.2 Complementarity, synergy and donor coordination

The EU funded action is part of a mutually reinforcing package of analytical work, technical assistance, policy lending, and assistance; it will support and be complemented by the various ongoing and proposed initiatives in the gas and energy sectors and will also inform the broader sector dialogue and the design of future operations.

Specifically, the action is linked to: (i) the ongoing and upcoming WB general budget support operations (Development Policy Financing – DPF series)⁶, which contemplate actions consistent with the proposed activity, e.g. the operationalisation of the Gas-to-

⁶ Budget support programme for a total amount of USD 1.443 million, including guarantees from the governments of the United Kingdom (USD 371.82 million) and Canada (USD 72 million).

Power Inter-ministerial Committee (tasked with planning and coordinating actions leading to reduced gas flaring targets and increased gas-to-power allocations, as well as transparency and governance of SOEs.); (ii) WB's Reimbursable Advisory Service (RAS) for Structuring of Gas Value Chain and Gas Marketing in Iraq, which contemplates a series of reform recommendations and a prioritised roadmap for their implementation and (iii) the ongoing WB Technical Assistance for Subsidy Reforms in the Energy Sector financed by the Energy Sector Management Assistance Program (ESMAP) Subsidy Reform Technical Assistance Facility, which will inform Government decision making through an analysis on impacts of subsidy reform on growth and poverty. WB's operations in Iraq are consistent and aligned with commitments set forth in the IMF's Standby Agreement.

Other donors supporting the Government of Iraq include: IMF's Standby Agreement (USD 1.6 billion), a US-guaranteed bond (USD 1 billion, issued in January 2017), a Eurobond issuance (USD 1 billion), a budget support loan by JICA (USD 200 million), a budget loan from France (USD 450 million) and a budget support grant by the European Commission (USD 100 million). Additional external financing is covered by project loans from the United States (USD 1.428 billion), China (USD 833 million), Japan (USD 350 million), Germany (USD 190 million), WB (USD 100 million), Sweden (USD 150 million), Italy (USD 134 million), United Kingdom (USD 100 million), the Islamic Development Bank (USD 50 million) and project loans in the electricity sector (USD 240 million)⁷

The action is in line with the EU engagement in the oil sector through the ongoing EU Iraq Energy Centre programme, which aims at promoting cooperation between energy businesses in the EU and covering research, training, policy dialogue and business cooperation.

3.3 Cross-cutting issues

The action will improve energy efficiency and help in the reduction of gas flaring, reducing climate change effects, as there will be a reduction of the methane in the atmosphere. Similarly, by strengthening gas-to-power strategy, the action will promote the use of domestically-produced natural gas in power generation, resulting in the direct displacement of more polluting fuel oil and diesel, significantly improving air quality by reducing energy-related emission, and generating immediate positive fiscal and balance of payments effects. Government of Iraq has capacity to carry out environmental impact assessments, and monitor and report on possible risks and mitigation measures in power generation using gas and private sector investment in gas capture, processing and transmission infrastructure.

The programme would conduct a capacity needs assessment of male/female beneficiaries/staff of the energy and petroleum institutions and ensure participation of both in capacity enhancement activities and workshops. The stakeholder/citizen engagement will include focus group discussions to understand the experiences with regard to the electricity services and expectations. This would be done in a gender disaggregated fashion so that the different viewpoints of men and women are captured and implemented.

⁷ Source: Iraq Economic Memorandum, IMF March 2017

4 DESCRIPTION OF THE ACTION

4.1 Objectives/results

This action is relevant for the Agenda 2030, contributing primarily to the progressive achievement of SDG Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all. This does not imply a commitment by the country benefiting from the action.

The Overall Objective is to ensure increased and more reliable access to energy for the Iraqi population. The Specific Objectives are to: (i) improve operational performance and fiscal sustainability of the electricity sector; and (ii) assist the Government of Iraq in devising a gas sector strategy for domestic use. The action is designed around two components in Electricity and Gas sectors.

Expected outputs in the Electricity sector: (1.1) Infrastructure restoration and development: definition of plans for reliable power supply service, including renewable energy generation and development; (1.2) Efficiency improvement: establishment of a system for loss reductions and generation efficiency; (1.3) Fiscal sustainability: development of plan and legislation for reduced sector subsidies; (1.4) Institutional development: capacity building and sector reforms.

Expected outputs in the Gas sector: (2.1) Gas policy: establishment of explicit, consistent, stable and sustainable policy guidelines regarding natural gas development and use; (2.2) Gas Sector Governance and Capacity under the Deputy Minister for Gas Affairs (DMGA); (2.3) Gas sector SOEs consolidation and modernisation; (2.4) Private sector participation (PSP): regulatory, contractual and commercial frameworks to enable private sector participation across the gas value chain.

4.2 Main activities

The action is characterised by the provision of technical assistance advisory services, diagnostic studies and capacity building.

In the Electricity Sector:

1.1. Power Sector Planning and Fiscal Sustainability: development of medium-long term policy, strategy and investment plans for reduction of cost generation, network system losses including sector financial modelling and least cost load dispatch (reduced gas flaring and increased gas-to power) and a sector recovery plan. Other activities could include but not be limited to demand forecasting, system expansion planning, renewable energy development (wind/solar); energy efficiency and conservation (such as efficient lighting, energy use substitution, equipment labelling, etc.)⁸. Renewable Energy Development will be given special attention⁹ by supporting the preparation of a Sector Investment Plan, including an assessment of the country's renewable energy

⁸ These activities will be complementary to subsidy reforms covered by the ongoing WB programme on Subsidy Reforms in the Energy Sector and to the increased expansion in natural gas processing to be used for urgent power generation needs, agreed by Government in the WB's general budget support programme (DPF).

⁹ The INES foresees that renewable capacity will be equivalent to about 4 % of the country's total generation capacity by 2030. In the short-term, the focus of renewable generation is to supply remote off-grid locations.

potential (hydro, solar and wind) as part of renewable energy integration. Activities aimed at renewable energy development; such as renewable energy mapping and energy use substitution may also be developed. Small pilot actions in the field of renewable energy will be funded through a call for proposals.

1.2 Emergency Electricity Services Restoration and Operations Efficiency: activities and advisory services aimed at improving: (i) supply chain efficiency; (ii) system outage frequency; (iii) generation plant operations; (iv) non-technical loss reduction strategic plan.

1.3 Market solutions to foster private sector participation and investments: activities assessing options for increased private sector participation in the sector (service contracts for billing and collection, privatisation of distribution directorates, tariff restructuring towards full cost recovery, whilst ensuring protection of the poorest and most vulnerable population).

1.4 Citizen/Stakeholder Engagement: outreach activities to the public and other stakeholders to ensure consumers understand their rights and responsibilities, including demanding service provider legal responsibilities and accountability¹⁰.

In the Gas Sector:

2.1 Gas Sector Policy Framework - establishment of sustainable policy guidelines for natural gas infrastructure development, use, and private sector investment; eliminating discrepancies and promoting transparency of gas pricing mechanisms; adopting flaring reduction targets in existing projects, introducing minimum operating standards to prevent routine flaring in new crude oil production fields, and establishing monitoring, measuring and reporting requirements, and penalties in case of non-compliance¹¹.

2.2 Gas Sector Governance and Capacity Building, including planning and regulatory capacity under the DMGA; establishing regulatory authority and the industry's organisational framework; building oversight capacity under the Ministry of Oil to promote and oversee private sector participation in gas exploration, production and infrastructure development.

2.3 Gas sector SOEs: guidelines and action plan for the consolidation and modernisation of existing gas-related SOEs to competitively participate in the gathering, processing, transport and distribution of natural gas and gas liquids; establishment of a bankable, entrepreneurially managed, for profit, and internationally competitive state-owned gas company; development of a plan to budget and upgrade natural gas related infrastructure to optimise performance, and minimise losses¹².

2.4 Private sector participation (PSP) framework: establishment of competitive landscape for public/private project development and operation through clear guidelines for potential investors, adoption of modern commercial contracts, operationalisation of a gas-to-power aggregator, gradual construction of a prioritised regulatory framework

¹⁰ This will build on the communications strategy being prepared under the ongoing WB Subsidy Reforms in the Energy Sector.

¹¹ This activity is in line with the WB Reimbursable Advisory Services.

¹² This activity is along the lines of the WB Reimbursable Advisory Services recommendations.

an introduction of a Non-Associated Gas Exploration and Production contract template¹³.

4.3 Intervention logic

This Action in support of energy sector reforms is in line with the Multiannual Indicative Programme for Iraq 2014-2017 and its Sustainable Energy focal sector, specifically the objectives related to improvement of the legislative and regulatory framework of the electricity sector, the development of institutional policies and managerial capacities and the enhancement of energy efficiency.

The action will contribute to gradually build and establish adequate policies and institutional and governance capacity, fundamental for the Government of Iraq to tackle the indiscriminate use of energy subsidies, which are not fiscally sustainable, induce over-consumption and generate negative environmental impacts. In the gas sector, the expected outputs are essential to exploit untapped gas generation for domestic use and to meet government commitments for the gradual elimination of environmentally unsustainable gas flaring.

The improvement of both energy and gas sector performances will contribute to the ultimate goal of ensuring increased and more reliable access to energy for the Iraqi population. More reliable electricity supply service is not only expected to benefit single consumers but also support leading firms and business to expand, with a positive impact on job creation.

5 IMPLEMENTATION

5.1 Financing agreement

In order to implement this action, it is foreseen to conclude a financing agreement with the partner country.

5.2 Indicative implementation period

The indicative operational implementation period of this action, during which the activities described in section 4.2 will be carried out and the corresponding contracts and agreements implemented, is 48 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's authorising officer responsible by amending this decision and the relevant contracts and agreements; such amendments to this decision constitute technical amendments in the sense of point (i) of Article 2(3)(c) of Regulation (EU) No 236/2014.

¹³ These activities will build on the triggers set in the World Bank general budget support programme, to support investment in flare reduction infrastructure.

5.3 Implementation modalities

The Commission will ensure that the entities receiving funds in direct and indirect management and providing financing to third parties in the context of this action will ensure compliance with EU restrictive measures affecting Iraq.

5.3.1 Grants: call for proposals (direct management) “Piloting Renewable Energy in Iraq”

(a) Objectives of the grants, fields of intervention, priorities of the year and expected results

The objectives of the call are to explore and identify Renewable energy or innovative pilot actions in the energy sector supporting vulnerable communities.

The expected results of the action aim to ensure adequate and affordable access to renewable energy for vulnerable segment of the Iraqi population.

The main activities will explore potential pilot actions in the field of renewable energy or innovative ways to ensure access to electricity for vulnerable communities.

(b) Eligibility conditions

In order to be eligible for the grant, applicants must:

- be legal persons, and
- be a specific type of organisation such as: a Member State's agency, non-governmental organisation, public sector or economic operator, local authority, international (inter-governmental) organisation as defined by Article 156 of Regulation (EU, Euratom) 2018/1046, and
- be established in Iraq or in a Member State of the EU or an eligible nation as per Article 9 (DCI) of the Regulation (EU) 236/2014 (CIR). This obligation does not apply to international organisations, and
- be directly responsible for the preparation and management of the action with the co-applicant(s) and affiliated entity(ies), not acting as an intermediary.

Subject to information to be published in the call for proposals, the indicative amount of the EU contribution per grant is EUR 1 000 000 and the grants may be awarded to sole beneficiaries and to consortia of beneficiaries (coordinator and co-beneficiaries). The indicative duration of the grant (its implementation period) is 24 months.

(c) Essential selection and award criteria

The essential selection criteria are financial and operational capacity of the applicant.

The essential award criteria are relevance of the proposed action to the objectives of the call; design, effectiveness, feasibility, sustainability and cost-effectiveness of the action.

(d) Maximum rate of co-financing

The maximum possible rate of co-financing for grants under this call is 95 %. The rate may be higher if the auto-financing capacity of the targeted beneficiaries is weak.

If full funding is essential for the action to be carried out, the maximum possible rate of co-financing may be increased up to 100 %. The essentiality of full funding will be

justified by the Commission's authorising officer responsible in the award decision, in respect of the principles of equal treatment and sound financial management.

(e) Indicative timing to launch the call

The call will be tentatively launched in the fourth trimester of 2018 or first trimester of 2019.

5.3.2 Indirect management with an international organisation

This action may be implemented in indirect management with the World Bank. This implementation modality provides for maximum flexibility and entails the provision of technical advisory services and capacity building to support the Government of Iraq reforms in the national energy and gas sector. The implementation through the WB is justified in light of the ongoing support provided by the Bank, through a larger scale intervention in the energy sector reforms, to which this action is complementary. The Bank is uniquely positioned as an implementing partner and brings synergies for both the sector policy development and increased private sector participation. The Bank has had a long engagement in Iraq's energy sector, which included supporting the INES development. Within the framework of the INES, the Bank is also supporting the Government of Iraq in the development of its domestic gas sector through the RAS for the Structuring of the Gas Value Chain and Gas Marketing. The Bank, under the ongoing DPF II, is also supporting the Government of Iraq to have in place appropriate policies related to: (i) improved energy efficiency by reducing gas flaring and increased gas to power generation; and (ii) reduced energy subsidies. Complementary to the Bank direct support to the Government of Iraq, the International Finance Corporation (IFC) is supporting several Independent Power Producers (IPPs)¹⁴, the direct beneficiaries of increased gas-to- power and sector fiscal sustainability.

The entrusted entity would carry out the following budget-implementation tasks: Launching of procurement of services and goods; Definition of eligibility, selection and award criteria; Evaluation of tenders; Award of contracts; Acting as contracting authority concluding, monitoring and managing contracts; Carrying out payments, and recovering moneys due.

For the budget-implementation tasks not yet assessed, the WB is currently undergoing ex-ante assessment. The Commission's authorising officer responsible deems that, based on the compliance with the ex-ante assessment based on Regulation (EU, Euratom) No 1605/2002 and long-lasting problem-free cooperation, the international organisation can be entrusted with budget-implementation tasks under indirect management.

5.4 Scope of geographical eligibility for procurement and grants

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply.

The Commission's authorising officer responsible may extend the geographical eligibility in accordance with Article 9(2)(b) of Regulation (EU) No 236/2014 on the

¹⁴ There are advanced negotiations for a new generation capacity of about 6GW, of which 1GW is expected to become operational in 2017.

basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realisation of this action impossible or exceedingly difficult.

5.5 Indicative budget

Module	EU contribution (EUR)
5.3.1 Direct management - call for proposals	1 000 000
5.3.2 Indirect management with World Bank	12 850 000
Monitoring, Evaluation and Audit services	150 000
Communication and Visibility	0 (Covered by the Administrative Agreement with World Bank)
Total	14 000 000

5.6 Organisational set-up and responsibilities

This action will be implemented through the contribution to a World Bank Trust Fund. The electricity component of this action will be implemented by the WB for the benefit of the Government of Iraq, with the Ministry of Electricity and the Ministry of Oil as key counterpart line ministries.

It is expected that the Iraq Inter-Ministerial Gas-to-Power Committee (IMC), will be the institutional counterpart for project implementation. The Committee, created under the scope of the World Bank's DPF I by Council of Ministers resolution 370 of 2015, was established as a specialised organisational structure to facilitate coordination between the Ministry of Oil, the Ministry of Electricity and the Ministry of Finance for (i) the planning, prioritisation and financing of investments needed in natural gas capture, processing and transport and power generation, and (ii) to expedite gas-to-power projects, and effectively address bottlenecks in the optimal utilisation of existing assets.

The Committee's official members are the Ministers of Oil, Electricity and Finance. It is chaired by the Minister of Oil or his appointed delegate, with the participation of the Ministers of Electricity and Finance, or their appointed delegates.

It is expected that a **Committee Executive Secretariat** will be created and charged with responsibility for the operationalisation of the Inter-Ministerial Gas-to-Power Committee, and that each Ministry will designate one permanent member to the Secretariat to act as operative liaison between the Inter-Ministerial Gas-to-Power Committee and the Ministries. The Secretariat will act as project coordination unit and will also be responsible for planning, reporting, and operative programming. While the respective designated technical departments of the Ministry of Oil and the Ministry of Electricity will remain responsible for the implementation of the specific activities, the Secretariat will ensure that activities are adequately coordinated and effectively implemented in a timely fashion. The proposed implementation arrangement is aimed at ensuring that the primary beneficiaries (Ministry of Oil and Ministry of Electricity) assume full responsibility and ownership of the activity outputs by jointly participating

as activity counterparts through the Secretariat in addition to building internal capacity through hands-on, on-the-job training.

A Project Steering Committee will be established with participation of the IMC members or their IMC delegates, the WB's project team leaders, and representatives from the Delegation of the European Union to the Republic of Iraq's project team and from other donors that may in future provide support to the activity. The Project Steering Committee will meet on an annual basis to assess progress and provide guidance on project implementation.

The WB will be responsible for the management and administration activities of this action, with the exception of the grant component which will be directly managed by the European Commission. WB responsibilities include but are not limited to, supporting the governance arrangements and related meetings; planning and executing work plans and budgets; developing communications programme including visibility activities, and conducting outreach; disseminating lessons learned; reporting on progress; and monitoring and evaluating the programme. The various activities shall be administered in accordance with the Bank's applicable policies and procedures, as the same may be amended from time to time, including its procurement, financial management, disbursement and safeguard policies, its framework to prevent and combat fraud and corruption.

5.7 Performance monitoring and reporting

Since the selected indicators in the logical framework are linked to the disbursement of WB and IMF loans and, thus, annually monitored by the Bank, they will be responsible for data collection and monitoring of the indicators.

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process and part of the implementing partner's responsibilities. To this aim, the implementing partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (outputs and direct outcomes) as measured by corresponding indicators, using as reference the logical framework matrix (for project modality) or the list of result indicators (for budget support). The report shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

The Commission will undertake additional project monitoring visits both through its own staff and through the award of a service contract to independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

5.8 Evaluation

Having regard to the nature of the action, a mid- term and final evaluation(s) will be carried out for this action or its components via independent consultants contracted by the Commission.

A mid-term evaluation will be carried out for learning purposes, in particular with respect to assessing the effectiveness and level of ownership of the programme and to start strategising on future follow up.

A final evaluation will be carried out for accountability and learning purposes at various levels (including for policy revision), taking into account in particular the fact that this is the first EU funded action focusing on energy policy.

The Commission shall inform the implementing partner at least 3 months in advance of the dates foreseen for the evaluation missions. The implementing partner shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to project premises and activities

The evaluation reports shall be shared with the partner country and other key stakeholders. The implementing partner and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

Indicatively, two contracts for evaluation services shall be concluded in the second and last year of the implementation of this action.

5.9 Audit

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audits or expenditure verification assignments for one or several contracts or agreements.

Indicatively, one contract for evaluation services shall be concluded in the last year of the implementation of this action.

5.10 Communication and visibility

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU.

This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation and supported with the budget indicated in section 5.5 above.

In terms of legal obligations on communication and visibility, the measures shall be implemented by the Commission, the partner country, contractors, grant beneficiaries and/or entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement and grant contracts, and delegation agreements.

The Communication and Visibility Manual for European Union External Action shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

APPENDIX - INDICATIVE LOGFRAME MATRIX (FOR PROJECT MODALITY) ¹⁵

“The activities, the expected outputs and all the indicators, targets and baselines included in the logframe matrix are indicative and may be updated during the implementation of the action, no amendment being required to the financing decision. When it is not possible to determine the outputs of an action at formulation stage, intermediary outcomes should be presented and the outputs defined during inception of the overall programme and its components. The indicative logframe matrix will evolve during the lifetime of the action: new lines will be added for including the activities as well as new columns for intermediary targets (milestones) for the output and outcome indicators whenever it is relevant for monitoring and reporting purposes. Note also that indicators should be disaggregated by sex whenever relevant.”

	Results chain	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
Overall objective: Impact	OO 1. Ensure increased and more reliable access to energy for the Iraqi population.	1.1. hours (per day) of uninterrupted electricity supply	1.1. 15 (2015)	1.1. 20 hours (2020)	1.1 Ministry of Electricity Control Centre (NCC) Operations Data	
Specific objective(s): Outcome(s)	SO 1. To improve the operational performance and fiscal sustainability of the electricity sector	1.1. Unit Cost of electricity generation 1.2 Percentage of electricity revenue	1.1 USD 0.13/KWh (2015) 1.2 30 % (Collected/ Generated)	1.1 USD 0.10/KWh (2020) 1.2 >50 % (2020)	1.1 - 1.2. Quarterly Ministry of Electricity Commercial Department reports	- Economic crisis does not escalated - Government leadership, commitment and follow-up on key policy decisions - Government able to undertake planned investment as scheduled

¹⁵ Mark indicators aligned with the relevant programming document mark with '*' and indicators aligned to the EU Results Framework with '**'.

	Results chain	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
	SO 2. To assist Government of Iraq in devising a gas sector strategy for domestic use *	2.1 Share of gas in the total energy mix 2.2 Volume of Gas processed 2.3. volume of Gas allocated for power production 2.4 Status of gas processing targets	2.1 40 % (2015) 2.2 590 MMscfd (2015) 2.3 571 MMscfd (2015) 2.4 798 MMscfd (2016 -2017)	2.1 >60 % (2020) 2.2 1300 MMscfd (2020) 2.3 > 1200 MMscfd (2020) 2.4 <i>To be defined by the implementing partner during the inception phase of the project</i>	2.1 - 2.4 Annual Ministry of Oil and DMGA reports, Directorate of Planning Studies	
Outputs	1.1. Infrastructure restoration and development: definition of plans for reliable power supply service, including renewable energy generation	1.1.1 Status of Sector Investment Plan and Financing Strategy* 1.1.2 Status of renewable energy sector investment plan* 1.1.3 Number of Iraqis benefitting from the pilots projects in renewable energy initiated by the project	1.1.1 Strategy not prepared (2016) 1.1.2 Renewable energy sector investment assessment not prepared (2016) 1.1.3 0 (2017)	1.1.1 Sector investment plan is drafted (2020) 1.1.2 Renewable Energy Assessment report finalised (2020) 1.1.3 <i>To be defined by the implementing partner during the inception phase of the pilot project</i>	1.1.1 Minutes of the preparatory meetings/consultations proceedings of workshops and strategy document 1.1.2 Minutes of the preparatory meetings/consultations, proceedings of workshops, investment plan document	- Economic crisis does not escalated - Government leadership, commitment and follow-up on key policy decisions

	Results chain	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
					1.1.3 Field visits and monitoring reports, annual projects reports	
	1.2. Efficiency improvement: establishment of a system for loss reductions and generation efficiency	1.2.1 Loss Reduction action Plan* 1.2.2 Status of Generation Plants' Merit Order Dispatch	1.2.1 Loss Reduction action Plan not prepared (2016) 1.2.2 Status of Generation Plants' Merit Order Dispatch not prepared (2016)	1.2.1 Loss Reduction Strategy report finalised (2019) 1.2.2 Generation Merit Dispatch Report finalised (2020)	1.2.1 - 1.2.2 Minutes of the preparatory meetings/consultations and action plan document	
	1.3 Fiscal sustainability: development of plan and legislation for reduced sector subsidies	1.3.1 Status of the plan for reduced sector subsidies 1.3.2 Number of Private Sector Led Operations (IPPs/Service Contracts)	1.3.1 Status of the plan for reduced sector subsidies not prepared (2016) 1.3.2 3 (2016)	1.3.1 Status of the plan for reduced sector subsidies finalised (2020) 1.3.2 >10 (2020)	1.3. Minutes of the preparatory meetings/consultations and plan for reduced sector subsidies 1.3.2 Private Sector Engagement Benchmarking Report (2020)	

	Results chain	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
	1.4 Institutional development: capacity building and sector reforms*	1.4.1 Number of staff (gender disaggregated) trained by the project who can demonstrate increased knowledge (disaggregated by sex and type of knowledge) 1.4.2 Annual customer/Stakeholders Satisfaction Survey 1.4.3 Number of policies addressing the needs and/or concerns raised by the public drafted under the project	1.4. 1 0 (2017) 1.4.2 None (2016) 1.4.3 Zero (2017)	1. 4.1 2000 (2020) 1.4.2 Survey report produced (2019/2020) 1.4.3 <i>To be defined by the implementing partner during the inception phase of the pilot project</i>	1.4.1 List of participants in the trainings 1.4.2 Report published in 2020 1.4.3 Draft policies	
	2.1. Gas policy: establishment of explicit, consistent, stable and sustainable policy guidelines regarding natural gas development and use.	2.1. Status of gas-to-power Action Plan	2.1 Gas-to-power Action Plan not prepared (2016)	2.1. Gas-to-power Action Plan approved by Council of Ministers (2020)	2.1 Minutes of the preparatory meetings/consultations and action plan document	
	2.2. Gas Sector Governance and Capacity under the Deputy Minister for Gas Affairs.	2.2. Status of Gas sector Planning	2.2.Sector planning in Ministry of Oil not in place (2017)	2.2 Planning Unit and Regulatory Unit created under Ministry of Oil's DMGA (2018)	2.2 Ministerial resolution	
	2.3. Gas sector State Owned Enterprises consolidation and modernisation.	2.3 Number of Gas-related SoEs guidelines and action plan for the	2.3 3 (2017)	2.3 5 (2020)	2.3 Council of Ministers resolution approving creation of companies	

	Results chain	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
	2.4 Private sector participation (PSP): regulatory, contractual and commercial frameworks to enable private sector participation across the gas value chain.	consolidation and modernisation of the gas sector State Owned Enterprises 2.4. Core contractual and regulatory framework for private sector participation in natural gas development introduced.	2.4 None (2017)	2.4. Core contractual and regulatory framework for gas processing, gas transport and gas marketing in place (2018)	2.4 Council of Ministers resolutions on approved regulations on Gas pricing, Gas marketing and Gas transport	