

RECONSTRUCTION & INVESTMENT

PART 3

Investment Opportunities and Reforms

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PART 3

Investment Opportunities and Reforms

Preface

Iraq has suffered from decades of conflict and economic volatility. More recently, the ISIS war and the protracted reduction in oil prices since mid-2014 have represented twin shocks that have severely impacted Iraq's heavily oil-dependent and non-diversified economy. The Government of Iraq is taking steps to control expenditures and lay the ground for structural reforms. Given the current economic and financial situation, the public investment budget is insufficient to meet the vast recovery needs. Meanwhile, external financing for development and humanitarian aid can only partially finance the recovery and reconstruction costs. Large scale investments in the form of private sector led projects can play an important role in financing the reconstruction efforts. Such investments are unlikely to materialize at the needed scale unless the overall framework and investment climate undergoes significant improvements.

The Government of Iraq is committed to create the enabling environment to attract private investments to meet its national development goals, and foster economic growth. In this regard, the Government of Iraq is striving to design and implement a reform agenda to promote domestic and foreign investments and optimize their benefits.

In pursuit of a better investment climate, the Government of Iraq will promote the adoption of key international principles in investment policy. As such, every effort will be made to pursue good regulatory practices for domestic and foreign investors, as well as among foreign investments coming from different countries. The Government will also ensure effective property protection and promote effective investment retention. Pursuing the highest governance standards and maintaining environmental and social standards will also be detrimental to nurturing a favorable investment climate for attracting increased private financing in the future as well as ensuring a more efficient use of public resources.

The Government of Iraq recognizes that private sector led investments will depend on its ability to demonstrate credible progress on much-needed reforms as well as strong commitment to accountability and transparency. This report outlines the first wave of reforms to be implemented by the government, with subsequent phases to be developed and executed during the reconstruction phase. It also presents an important element to realize the government's financing strategy. Finally, the document presents a high-level overview of the Investment Opportunities available in Iraq at the national and subnational levels across 12 sectors.

A vibrant and prosperous investment climate that generates jobs to Iraq's rapidly growing population is a necessary condition for sustainable progress toward reducing poverty and bringing inclusive economic growth.

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Chairman of Iraq National Investment Commission

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<u>BACKGROUND</u>

1. Background

Iraq now stands at a critical juncture in its history. The liberation of major cities and governorates affords an opportunity to not only reconstruct and rehabilitate the former occupied areas, but to forge a renewed social contract based on citizen-state trust, social cohesion, *private sector-led growth, and sustainable development*. In this spirit, the GoI developed the Recovery and Development Framework (RDF) that outlines the Government's commitment and approach for moving from emergency to recovery and development for the population affected by the crisis.

The Government of Iraq (GoI) aims to encourage private sector investment in Iraq to help meet its national development goals and its priorities for reconstruction set out in the Iraq Recovery and Development Framework (RDF). The Government of Iraq strives to design and implement a reform agenda to promote domestic and foreign investment and optimize the benefits from it. This Framework for Reforms and Investment for Reconstruction outlines the first wave of reforms to be implemented by the GoI, with subsequent phases to be developed and executed during the reconstruction phase. It also presents an important element to realize the government's financing strategy under the RDF which aims to mobilize private investment. Finally, the document presents a high-level overview of the Investment Opportunities available in Iraq at the national and subnational levels across 12 sectors.

2. An Investment Climate Reform Action Plan

GoI commits to continuous improvement of the business environment and the investment climate in Iraq to increase the productivity of economic activities and worker productivity to boost the competitiveness and diversity of the economy and so that the private sector has an active role in the fields of investment and generating protected work opportunities. GoI is committed to creating an investment climate conducive for both domestic and foreign investment that generates positive effects on the domestic economy.

The GOI commits to systematically seek accountable and effective partnerships with the private sector in order to maximize the total envelope of financing available for recovery, development, growth and job creation by the private sector. As part of its financing strategy for the RDF, the government will put special emphasis on the potential to unlock private capital and commits to the establishment of a robust investment climate that can attract the private sector to invest. This will entail taking policy and programming actions that, together with the use of public financing, can crowd in much needed private sector financing and expertise. A pro-active engagement with the

private sector will accelerate its investment response and new linkages to the reconstruction efforts through the provision of ancillary services and associated jobs. A key aspect of this orientation will be upstream assessment as to the potential to have key high priority public investments financed by the private sector and, where needed target reform efforts towards those policy, legal, regulatory, pricing and institutional constraints that will mobilize this source of funding.

To further this engagement with the private sector, the Government commits to initiate a systematic public-private dialogue to identify the national and sector policy priorities and that would need to be addressed - including identification of potential financing facilities needed to complement this reform agenda – to foster a step-change in generating private financing for sustainable, equitable growth and job creation in Iraq. This dialogue process, building on the Kuwait Conference, shall be timebound over the subsequent six months and the outcome set out in a "Strategy for the Maximization of Finance for Development" to be adopted by the Government of Iraq.

In that context, investment in the development of infrastructure services, such as transport and logistics, petrochemicals and agriculture and agribusiness, and supported by the construction sector is key, as these sectors have spill-over effects on other private-sector activities and supports exports and export-oriented investments. Reforms undertaken will be aimed at increasing the attractiveness of Iraq for all types of investment, but in particular for investments aligned with this vision. The proposed reforms do not represent the totality of reforms needed to be undertaken by the GoI most notably macro-fiscal reforms and several specific sectoral reforms are not included here. Rather, the reform action plan outlined below is focused on policy reforms around private sector participation and investment in Iraq and governance reforms with the greatest relevance to private investors.

The first phase of investment climate reforms focuses on four key areas:

- Enabling private sector participation in the economy: These reforms are focused on the public-private partnership framework and reforms related to state-owned enterprises and their role in the economy.
- Reforming investment policies: These reforms are focused on attracting investment, facilitating investor entry, and improving investor retention.
- Reforming regulation of business operations: Reforming the regulatory framework and practices around business operations, including registration of businesses and property and cross-border trade.
- Governance reforms: These reforms are focused on the broader governance context for investment and government-to-business relations in Iraq, including procurement, anti-corruption, and the creation of high-level ownership of reform delivery and change management.

The reforms undertaken by the GoI in these areas are presented in the following sections including those reforms recently undertaken, with the reforms that could be implemented in the short term followed by the one that would be implanted in the medium to long term.

2.1 Investment Climate Reforms Already Completed

The GoI has already undertaken several key reforms, signaling its commitment to enhancing Iraq's investment competitiveness. The following reform actions, have already been implemented by the GoI focused primarily on governance reforms that improve the context for investment and government-to-business relations:

- **1.** Creation of the Economic Reform Unit in the Prime Minister's Office: Recognizing the critical importance of economic reform, an Economic Reform Unit (ERU) has been established within the Iraqi Prime Minister's Office (PMO). It has been established to help set overarching economic and commercial policies to ease doing business in Iraq, attract FDI, and optimize the role of FDI in the country's overall investment and socioeconomic development strategy.
- **2.** Creation of the High-level Committee for Investment and Construction: Recognizing the critical importance of foreign direct investment (FDI) for Iraq, on May 16, 2017 the Prime Minister of Iraq (PM) issued Decision No. 6810/59 (dated May 18, 2017) establishing the interministerial "High-Level Committee for Investment and Construction" (High-Level Committee) charged with examining the fundamental and strategic issues impacting investment promotion, developing plans for large-scale investment projects and their follow up, and removing the obstacles to investment in accordance with the objectives of the National Investment Law No. 13 of 2006 as amended (NIL).
- **3.** Capping of state-owned banks' exposure to SOEs: On the financial Sector, the Central Bank of Iraq CBI issued a regulation capping exposure of all State-owned Banks SOB to non-financial State-owned Enterprise SOEs', the regulation was issued in November 2017. This regulation is expected to reduce the distortions and level the playing field between SOB and private sector banks by curtailing the access of SOE's to cheap SOB financing. The Central Bank of Iraq (CBI) also removed restrictions on private banks to provide financial services to SOE's.
- **4.** Public procurement reforms: GoI developed and indorsed three critical tools to ensure the effective and efficient use of public resources in public procurement: (1) National Bidding Documents; (2) Sector Bidding Document; and (3) a National Implementation Manual (NIM).

2.2 Ongoing Investment Climate Reforms

The GoI has initiated several reforms that are expected to be completed before the Iraq Reconstruction Conference. The GoI focused in the immediate term on investment policy reforms that improve investor protections, foster investor confidence, and prevent investor-state disputes, as well as on creating a mechanism for high level commitment and follow up of this reform action plan.

In the Area of Reforming Investment Policies:

- 1. The Iraqi Council of Ministers has approved the Draft Arbitration Law based on the UNCITRAL model arbitration law for submission to Parliament. The GoI in partnership with international organizations and experts has reviewed existing legislation and judicial practice on enforcement of arbitration agreements and awards, and has decided to proceed with a transformational reform to improve the domestic arbitration regime by adopting an UNCITRAL compliant modern Arbitration Law based on international standards. By February 10th, 2018.
- **2.** The Council of Ministers approves proposal to accede to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards. The Prime Minister's Office (PMO) established the "Committee Responsible for Assessing the Possibility of Iraq's Accession to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 1958" through Decree No. 373 dated October 13, 2016. This process of acceding to the convention is further confirmed by the Council of Minister's decision sign the Committee's proposal to ratify the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards to ensure the proper enforcement of arbitral awards in accordance with the terms of the Convention. **By February 10th, 2018**.
- 3. The National Investment Commission (NIC) has approved a risk-based approach for the issuance of investment licenses, which limits investment licenses only to high-risk projects in sensitive sectors and industries. Operationalize the National Investment Commission as One-Stop-Shop for investors by implementing a sector-specific "fast track" approach to expedite the process of the Investment Licenses. The newly adopted approach implements a risk-based approach rather than requiring all foreign investors to have their investment project approved. The risk-based approach allows the GOI to identify high-risk projects that have health, safety, and environment and public security risks which would be subject to investment licenses. Other projects no longer require investment licenses. By February 10th, 2018.
- **4.** The Council of Ministers has approved the introduction of an "investor visa" category enabling the NIC and Ministry of Interior to streamline the visa process for investors. This initial action to facilitate visas will be followed by proposed amendments to the Residency of Foreigners Law No. 118 of 1978. **By February 10th, 2018**.

In the Area of Governance Reform:

5. The Council of Ministers appoints the Economic Reform Unit (ERU) of the PM's office as the entity responsible for the execution and delivery of this reform action plan. The Council of Ministers has issued a decree which specifies structured accountability and reporting mechanisms requiring specific ministries with responsibilities for delivery and implementation of these reforms to provide reports to the ERU. The decree requires the ERU to report to the Council of Ministers periodically on progress of reforms and to identify specific areas where there are delays or lack of action. This is in addition to and complementary to the ERU's role as the Secretariat of the Highlevel Committee for Investment and Construction.

2.3 Reform Actions to be Completed in the Medium to Long Term

The above actions are part of an integrated first phase of investment climate reforms by GoI. The following Investment Climate Action Plan delineates the additional reforms planned to be completed after the conference as part of the first phase reform actions directly related to enabling private sector participation, investment, and business in Iraq, including some broader governance reforms that contribute to enhancing governance around government-to-business relations. This list of reforms includes those reforms that were identified as a priority for the first phase of reforms, but which are expected to take longer. A proposed timeline has been provided for each reform. The reform actions are organized around the four themes identified above: enabling private sector participation and investment in the economy, reforming investment policies, reforming regulation of business operations, and governance and anti-corruption reforms. Beyond the listed reforms under each theme, the GoI is working on implementing a wider set of regulatory reforms such as developing or amending the investment, Industrial, Public Private Partnership, and Labor laws which would most significantly contribute to sustainable private sector growth and increased productivity.

INVESTMENT CLIMATE REFORM ACTION PLAN

	Reform	Reform Actions	Timeline	
Er	Enabling private sector participation and investment in the economy			
1	Reduce the prices of internet services for Iraq to become a hub of transit internet traffic	Expedite the liberalization of competition within the optical fiber market to increase competitiveness and attract private sector investments. This reform could be achieved under the existing legal framework.	June 30 th , 2018	
2	Improving SOEs Legal and institutional framework	 Establish an open, accessible platform with information about public institutions and SOEs; Make SOEs subject to the fundamental principles of public procurement, including independent review of complaints; Elaborate mechanisms for Parliamentary oversight of SOEs; and Establish transparent recruitment practices in SOEs to address the problem of shadow employees. 	June 30 th , 2019	
3	Privatization of infrastructure maintenance and management	 Conduct fundamental sectoral analysis and adopt implementation program; Support the corporatization of the infrastructure management agencies; and Allow management agencies to operate on commercial lines. 	June 30 th , 2019	
4	Expanding private sector opportunities and introducing PPPs	 Deliver successful pilot transactions to develop expertise and market credibility; and Passage of a best practice standard PPP law to enabling conditions for successful PPP implementation - favorable investment environment. 	December 31st, 2019	
Re	forming Investment Policie	s		
5	National Investment Commission facilitates legalization of foreign public documents	Sign and ratify The Hague Apostille Convention of 1961 to facilitate legalization of foreign public documents between States that are parties to the Convention.	June 30 th , 2018	
6	Amend laws to legislate distinct "investor visa" category	 Develop a new visa category for investors and simplify the post-arrival compliance procedures for foreign investors; and To amend the Labor Law No. 37 of 2015 to permit investors to freely and directly hire qualified national and foreign labor for projects licensed under the NIL. 	December 30 th , 2018	

	Reform	Reform Actions	Timeline	
7	Develop detailed guidelines to operationalize the 2010 and 2015 Amendments to the National Investment Law NIL particularly in terms of land allocation for industrial projects	 Nullify the right of surface as provided in Law No. 1521 of 1981 given that it poses contradictions with the NIL; Automation of land registry to efficiently identify and allocate available land for investors; The estimation of land value and lease value should be specified based on clearly articulated procedures; and Introduction of an international standard mechanism for resolving land allocation and other investment project related administrative grievances. 	December 30 th , 2018	
8	Enhance Sectorial Competitiveness to attract domestic and foreign investors	 Develop and implement strategies for priority sectors; Propose amendments to the National Investment Law NIL and Investment Regulations IR as to streamline investment licensing procedures, further facilitate investment project implementation, and extend coverage to more domestic and foreign investors and to all economic sectors per international standards; Draft a National Investment Strategy which should identify the overall strategic direction of the GOI towards Special Economic Zones (SEZs), highlighting the importance of developing such facilities on a demand-driven commercial basis and rationale based on objective market demand assessments to determine sectors targeted for SEZs, and emphasizes principles for attracting developer/operator financing and addressing investors' needs in terms of streamlined regulatory licensing and infrastructure services; and Draft an SEZ Law to establish commercially-based facilities with best practice regulatory framework. In addition to identifying the regulatory framework for the proposed. 	December 30 th , 2018	
Re	Reforming Regulation of Business Operations			
9	Streamlining and simplification of company registration processes	Reduce number of procedures, cost and time to register a company by: i. Eliminating the minimum capital requirement; ii. Implementing an integrated system for checking the uniqueness of the company name; iii. Introducing standard articles of association and making lawyers' involvement in signing incorporation documents optional; iv. Making online registration possible; and v. Consolidating government approvals and payment of fees at one access point.	June 30 th , 2018	

	Reform	Reform Actions	Timeline
10	Reduce procedures, cost and time to transfer property	 Introducing "fast-track" procedures in property registration process; Unifying the valuation of properties completed by the Real Property Registry Office and the Tax authority and establishing standardized ways of valuing properties; and Computerizing municipal property records. 	December 30 th , 2018
11	Reduce the number of documents and time to trade across boarders	i. Streamlining the document requirements for import and export procedures; ii. Introducing risk-based inspections to reduce number of physical inspections of the goods; including an AEO (accredited economic operator) program; iii. Allow for electronic submission of documentation; iv. Creating a single window for trade transactions incorporating all government agencies related to trade procedures (e.g. health, agriculture); v. Simplify and harmonize customs procedures; vi. Establish coordination of all agencies dealing with the customs and border crossing procedures; and vii. implementation of border queuing management system at the main corridors.	December 30 th , 2018
12	Use of public procurement contract documents that meet international standards	Contractual provisions should meet the International Federation of Consulting Engineers (commonly known as FIDIC) standards to ensure a balanced approach to the roles and responsibilities of the main parties, as well as the allocation and management of risk.	December 30 th , 2018
13	Apply the UN Convention Against Corruption (UNCAC) Measures	 UNCAC requires parties to implement anticorruption measures focusing on: prevention, law enforcement, international cooperation, asset recovery, and technical assistance and information exchange. Iraq acceded to the Convention on March 17, 2008. However, the recommendation of UNODC's 2012 independent review are still relevant today, including: Continuing to strengthen the capacity within the government to implement AC measures. Develop legislation for a more complete and effective anti-corruption framework. Support the implementation of such framework, and ensuring that civil society participates in anticorruption efforts. 	December 30 th , 2018

	Reform	Reform Actions	Timeline
14	Develop a mechanism to help identify and address investors' grievances at an earlier stage	Sign and ratify the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards to ensure the proper enforcement of arbitral awards in accordance with the terms of the Convention; and Enact the requisite enabling legislation including the Draft Arbitration Law based on the UNCITRAL model arbitration law.	June 30 th , 2018
15	Managing the Effective Delivery of Economic Reforms	Establish a new body within the high committee on investment and reconstruction to execute the delivery of this reform action plan through structured accountability and reporting mechanism linked to specific ministries with responsibility for delivery of these reforms.	June 30 th , 2018

IRAQ OPEN FOR BUSINESS INVESTMENT OPPORTUNITIES: WHY IRAQ? WHY NOW?

After years of war, Iraq has liberated all its territories from ISIS control, and is united under a strong central government, with a strong army capable of keeping peace. The government is committed to an ambitious reform program focusing on improving the investment climate, supporting the private sector, and attracting foreign investors. Iraq has a relatively stable Macroeconomic framework, with an International Monetary Fund program supported by the World Bank Group. The country has no restrictions on transfer of funds, with as a healthy foreign international reserve, stable exchange rate regime pegged to the US dollar. With the 2nd largest oil reserves and huge reconstruction needs, Iraq provides investment Opportunities in all sectors. Despite the risk, investments in Iraq could provide among the highest rate of returns.

Prospects of improved security and stability, combined with expectations of firmer oil prices and a gradually strengthening economy, make Iraq a fertile ground for investments across a wide range of sectors. The identified needs cover virtually all economic sectors, and range from fertilizers and chemicals to refining and power, by way of transport, education and health.

In the oil and gas sector, numerous investments opportunities exist. A key need is the building and rehabilitating of gas infrastructure, and the expansion of gas-to-power generation capacity. The volume of flared gas is sufficient to meet most of Iraq's unmet needs for gas-based power generation, and represent a major investment opportunity.

The scope for investment in refineries is equally extensive. Processing capacity today is over 500,000 barrels a day. Iraq plans to triple its refining capacity by 2021 not only to meet internal demand but also for exports.

Similarly, large investments in expanding the pipeline network are needed. Iraq projects that it will expand its crude production from a capacity of about 5 million barrels per day today to 7 million barrels in 2022. An Iraq-Jordan pipeline is envisaged to eventually connect Basra with Jordan's Red Sea port of Aqaba.

Outside the oil and gas sector, opportunities have been identified in several areas, including in the fertilizer and petrochemical industries, and in agriculture/agribusiness-related such as fresh produced and processed foods. High food imports indicate the existence of potential for investments in agribusiness (e.g. horticulture) and light manufacturing, such as food processing. Chemicals, particularly petrochemicals, have attracted foreign direct investment, and domestic investment, and continue to provide opportunities. The major reconstruction efforts will create lucrative markets for construction, housing, infrastructure, construction materials, and services, creating much needed jobs to reduce the high unemployment rate.

Iraq enjoys a privileged geo-strategic location but has not been able to take advantage of its position. Investments in transport and logistics are critical to altering this, and to boosting domestic and foreign trade. Such investments would not only enhance integration internally, but also regionally between Iraq and its neighbors. Connecting Asia to Europe via a Basra rail link to Turkey is an example of the types of investments that are still needed; significant demand for transport and logistical services is expected to arise from the reopening of border crossings between Iraq and its neighbors.

After oil, Information and Communications Technology (ICT) is the largest private-sector-led contributor to GDP. There is much room for growth in the telecoms.

Opportunities also abound in the services sectors. Business services, as well as construction services, particularly for housing needs, present significant investment prospects. There is a proliferation of private investment opportunities in health and in education (hospitals, universities).

Iraqi government is positioning the country as investment destination with numerous projects, spanning over the country, across various sectors sponsored by the government. The National Investment Commission has identified over 190 projects in 12 sectors at the national and subnational levels. This section of the framework report provides high level overview of the available investment opportunities per sector in Iraq.

MASTER LIST OF PROJECTS AVAILABLE FOR INVESTMENT BY SECTORS

Introduction to Projects Identified

Two phase approach: The preparation for the list of the projects was preformed over two phases.

Phase one: Identify the projects under consideration

Initial data acquisition to collect project data from line ministries and governmental organizations.

The starting point for project data collection was a preliminary list of projects that the National Investment Commission (NIC) had previously aggregated from line ministries, including incomplete and other strategic projects.

The next phase was to identify the projects under consideration for investment from all ministries, which involved holding series of meetings with over 13 government agencies and ministries. The main objective of the meetings was to collect a comprehensive list of projects, which each ministry is considering to execute along with the relevant project data. With this exercise, NIC identified 157 projects.

In order to collect more relevant information, NIC developed a detailed questionnaire with data requirements, which was distributed to line ministries in a series of meetings. The questionnaire contained a wide range of questions to capture all project details, including background questions, financial and feasibility indicators, funding available for the project and percentage of completion (where applicable), among other factors.

Using the questionnaire, line ministries shared project data, which were more around project descriptions and high-level feasibility indicators. As a result, a list of over 185 projects was formulated, including projects across various sectors, such as oil & gas, education, health, power and utilities, housing, tourism, agriculture, communication, transportation and industrial sectors, which are geographically distributed across the country.

Based on the data collected from initial meetings, high-level screening was conducted on the +185 projects to arrive at a shorter list of projects to be discussed in follow up meetings with

line ministries, and collect further project details. The high-level screening considered project percentage of completion, extent of data available, and location. Meanwhile, considering projects that could potentially be listed for private sector participation.

Phase two: Screen identified projects and prepare final list of projects for each sector in conjunction with NIC priorities and strategy

Following the conclusion of Phase one: Identify the projects under consideration collecting data on the various projects, the NIC worked closely to arrive at the key considerations to screen projects, including:

Data availability: Consider the level of detailed information available about the project.

Project location: Projects chosen to cover all of Iraq based on needs.

Project revenue generation potential: Measures the asset's revenue generation potential.

Project investment cost and required funding: Measures the size of the investment to the private sector participants.

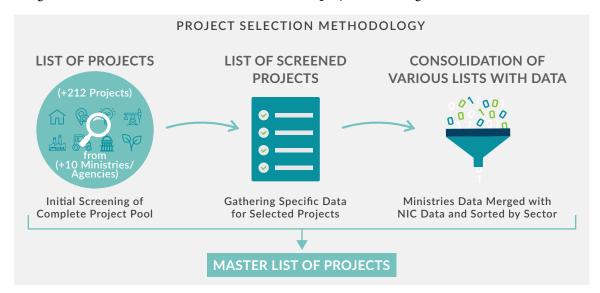
Project site nature (either brownfield or greenfield): Consider nature of the asset's site (greenfield vs. brownfield).

Project complexity: Consider the complexity related to executing the project.

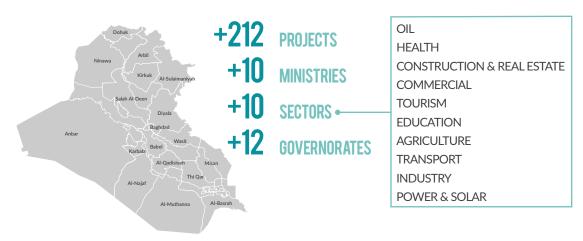
Project Selection Methodology

Phase two: Preparing final list of projects

In light of the above considerations, a Master list of projects covering 10 sectors was derived.

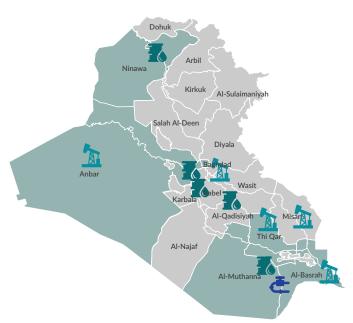


OVERVIEW OF PROJECTS READY FOR INVESTMENT



Oil Sector

OIL SECTOR - 11 PROJECTS



OIL REFINERIES

New Refinery in Al Faw
- 300 thousand bpd
New Refinery in Anbar
- 150 thousand bpd
New Refinary in Thi Qar
- 150 thousand bpd
Rehabilitation of Doura
Rehabilitation of Basra



Bin Omar field for crude oil Mosul field for Petroleum Products Tuba field for Petroleum Products Aziziya field for Petroleum Products Samara field for Petroleum Products



Sea water supply project in Basra

Oil Refinery Projects

1) New Refinery in Al Faw

Construction of new refinery in Al Faw Port with capacity of 300 thousand bpd.

2) New Refinery in Anbar

Construction of a refinery in Anbar Province with a production capacity of 150 thousand bpd.

3) New Refinery in Thi-Qar

Construction of new Al-Nasiria refinery in Thi Qar Province with a production capacity of 150 thousand bpd. (its proposed to be built on the basis of BOT or BOO system according to the amended law of refining crude oil numbered 64 for the year 2007).

4) Rehabilitation of Doura Refinery

5) Rehabilitation of Basra Refinery

Oil Storage Facilities

6) Bin Omar field for crude oil in Basra Province with a design capacity of $22 \times 66,000 \text{m}^3$ (first phase) and $9 \times 66,000 \text{m}^3$ (second phase).

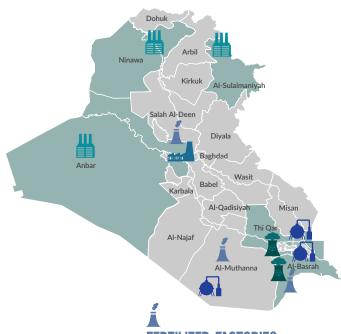
- 7) Mosul field for Petroleum Products. Gasoline $4 \times 10,000 \text{m}^3$, Diesel Fuel $3 \times 10,000 \text{m}^3$ and Kerosene $3 \times 10,000 \text{m}^3$ in Mosul Province.
- **8)** Tuba field for Petroleum Products. Gasoline $4 \times 20,000 \text{m}^3$, Diesel Fuel $2 \times 20,000 \text{m}^3$, Kerosene $3 \times 10,000 \text{m}^3$ and Jet fuel $2 \times 50,000 \text{m}^3$ in Basra Province.
- 9) Aziziya field for Petroleum Products. Gasoline $2 \times 10,000 \text{m}^3$, Diesel Fuel $1 \times 10,000 \text{m}^3$ and Kerosene $1 \times 10,000 \text{m}^3$ in Kut.
- **10)** Samara'a field for Petroleum Products. Gasoline $4 \times 2,500 \text{m}^3$, Diesel Fuel $2 \times 5,000 \text{m}^3$ and Kerosene $2 \times 5,000 \text{m}^3$ in Saladin Province.

Sea Water Supply

11) Sea water supply project in Basra. Project of supplying the joint sea water in Basra Province with expected capacity of 5 million bpd.

Industrial Sector

INDUSTRIAL SECTOR - 30 PROJECTS (1/2)



FERTILIZER FACTORIES

Rehabilitation of existing fertilizer plant in Baiji
Reconstruction and development of fertilizer plant in Abu Al Khaseeb
New production lines for fertilizer plant in Khor Al Zubair
Rehabilitation and development of phosphate plant in Qaim

CEMENT FACTORIES

Rehabilitation of a cement factory in Al-Fallujah Rehabilitation of a cement factory in Anbar Rehabilitation of a cement factory in Mosul

CHEMICAL AND ENGINEERING PLANTS

Rehabilitation and development of engineering plants Caustic Soda project Sodium carbonate project Sodium sulphate project Acid and alkaline factories

♠ i Petrochemical Plants

Petrochemical Plant in Al Faw Polypropylene production plant Petrochemical Plant in Basra

GLASS FACTORY

Rehabilitation and development of Glass factory in Al-Ramadi Float Glass factories in Karbala and Muthana provinces (2 projects)

Cement Factories

12) Rehabilitation of white cement plants in Al-Falluja

Area: 642,000m²

Production capacity: 290,000 tons per year for the two lines. Production capacity can be increased to 350,000 tons per year.

Cost for Rehabilitating and operating is US\$12,800,000.

Experienced staff is available to operate the plant. The plant (which is the only one in Iraq that produces white cement) is not working at the present time. Cement plants in Kubaisa, Qaim, in Anbar and Badoosh, Sinjar, Hamam Al Alil in Mosul are going through damage assessment by special committees (for the damages that occurred during 2014-2017).

13) Rehabilitation and development of white cement plants in Anbar

Currently going through damage assessment, for damages incurred from 2014-2017.

14) Rehabilitation and development of white cement plants in Mosul

Currently going through damage assessment, for damages incurred from 2014-2017.

Chemical and Engineering Plants

15) Rehabilitation and development of engineering plants

Al Nassir and Al Simood Co., Ibn Majid, The Heavy engineering equipment Co. (Ministry of Oil) and The Mechanical industries in Eskandariya to cover the needs of the oil and gas, electricity and heavy industries sectors for tanks, heat exchangers, valves, pipes, pumps, poles and cranes and other products the rehabilitation and development of these factories require new production lines as well as supporting infrastructure.

16) Caustic Soda project

Production of caustic soda, chlorine, Hypochlorite and Hydrochloric in Samawa Acid.

Area: 50 dunam

Production capacity: 40-50 tons per day.

Cost: US\$40 million.

17) Sodium Carbonate project

Production of Sodium Carbonate and Bicarbonate in Samawa

Area: 100 dunam

Production capacity: 50000 tons per year.

Cost: US\$ 50-60 million.

18) Sodium Sulfate project

Production of Sodium Sulfate in Samawa

Area: 25 dunam

Production capacity: 10 tons per day.

Cost: US\$ 20 million.

19) Acid and alkaline factories

Construction of Acid and alkaline factories at the sites of Al-Furat General Company

Concentrated Sulfuric acid: 24,750 tons per year

Aluminum Sulphate: 16,500tons per year

Petrochemicals Plants

20) Petrochemical plants in Al-Faw

Production of Liquid hydrocarbon products in Al-Faw Peninsula, 1,500 tons per year of Ethylene

21) Polypropylene production plant

Production: 650 tons per year of propylene.

Location: Al-Faw Peninsula (or west of Qurna).

Expected capital: US\$ 1.9 billion.

22) Petrochemical plants in Basra

Production: First phase: 1,200 tons per year of Ethylene. Second phase: Aromatics Concentrate

Location: Basra Province.

Cost: Capital payback and profits to be determined according to investor's feasibility study.

Glass Factories

23) Rehabilitation and development of glass plants in Al-Ramadi

Multipurpose raw glass (13 type of glass), such as glass for buildings, automobile and mirrors.

Iraq's need for float glass is doubling annually. The current estimate of 1,500 tons per day covers the local market. The unique location of the plant is suitable for exporting this product to the neighboring countries as raw or final product.

Target production capacity: 500,000 tons per year to be divided into two phases according to market capacity and required types.

Annual production cost in full capacity to produce 700 tons per day is around IQD 94 billion.

24) Float Glass factories in Karbala and Muthana provinces (2 projects)

Fertilizer Plants

25) Rehabilitation of existing fertilizer plant in Baiji and the implementation of new production lines (for export)

Production of 500 tons of Urea fertilizer.

Expected capital: US\$ 0.5 billion.

The plant is operated by LPG supplied by the North Co. in Kirkuk Province. 9 MW Generators are available to provide electricity for operation.

The ministry stopped operating the plant on 1/1/2014 due to difficult circumstances in Salah Al-Deen Province.

The plant has 1,165 workers.

About 60% of the plant is damaged.

26) Reconstruction and development of fertilizer plant in Abu Al Khaseeb (for export)

Plant history: The plant consist of two production lines, the old production line produced Urea granules 200 tons per day in addition to Sulfuric Acid and Ammonium Phosphate. This plant was completely destroyed during the war in the eighties. The second plant was established in 1973 and completed in 1976, designed to produce Urea fertilizer 420 thousand metric tons per year.

Location: The plant is located on Shat Al Arab next to Abo Floos River and near Abu Al Khaseeb town, 25km south of Basra in southern Iraq.

Infrastructure: The plant is close to the main road connecting Basra to the other cities available raw materials such as natural gas. Close to a big river as a source of water. Most of the raw materials are locally available, such as natural gas (40 million cubic feet per day is required) if operated according to design capacity.

Design capacity: Ammonium plant capacity is 800 metric tons per day. Urea plant capacity is 1,300 metric tons per day (420 thousand metric tons per year).

Target capacity: Present design capacity (or according to investor's suggestion).

Raw materials availability: Essential raw material is natural gas which is locally available.

Estimated cost for rehabilitation: Approximately US\$ 250 million (IQD 300 billion).

27) New production lines for fertilizer plant in Khor Al Zubair (for export)

Production of 500 tons of Urea fertilizer.

Expected capital: US\$ 0.5 billion.

Return on investment rate: (according to the investor's feasible study and estimations).

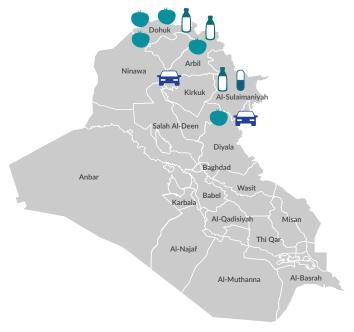
28) Rehabilitation and development of phosphate plant in Qaim and the Ukashat mine (for local demand and export)

Damages due to occupation (2014-2017) is to be estimated by local committees with the Ministry of Industry and Minerals. Technical and financial information for rehabilitation shall be based on recommendations of the joint committees.

29) Production and processing of certified seeds project in Duhok

Total project area: 25,000 sqm; estimated investment cost: USD 3 million; number of jobs created: 500

INDUSTRIAL SECTOR - 30 PROJECTS (2/2)



FOOD PROCESSING

Fruit juice factory in Halabja city Tomato paste factory in Duhok Grape juice factory in Duhok Vegetable oil factory in Erbil Vegetable oil factory in Sulaymaniyah Vegetable oil factory in Duhok



Dairy products & ice cream factory in Erbil Dairy products & ice cream factory in Sulaymaniyah Dairy products & ice cream factory in Duhok



Bus and mini bus assembly in Erbil city Farm tractor and agriculture machines assembling in Sulaimaniyah city



Pharmaceutical production (different capacity for variable drug) in Sulaimaniyah city

Food Processing Plants

30) Fruit juice factory in Halabja city

Total project area: 12,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 45

31) Tomato paste factory in Duhok

Total project area: 10,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 50

32) Grape juice factory in Duhok

Total project area: 12,000 sqm; estimated investment cost: USD 3 million; number of jobs created: 35

33) Vegetable oil factory in Erbil

Total project area: 12,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 45

34) Vegetable oil factory in Sulaymaniyah

Total project area: 12,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 45

35) Vegetable oil factory in Duhok

Total project area: 12,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 45

Dairy Products

36) Dairy products & ice cream factory in Erbil

Total project area: 30,000 sqm; estimated investment cost: USD 10 million; number of jobs created: 75

37) Dairy products & ice cream factory in Sulaimaniyah

Total project area: 30,000 sqm; estimated investment cost: USD 10 million; number of jobs created: 75

38) Dairy products & ice cream factory in Duhok

Total project area: 30,000 sqm; estimated investment cost: USD 10 million; number of jobs created: 75

Automotive

39) Bus and mini bus assembly in Erbil city

Total project area: 100,000 sqm; estimated investment cost: USD 25 million; number of jobs created: 100

40) Farm tractor and agriculture machines assembling in Sulaimaniyah city

Total project area: 100,000 sqm; estimated investment cost: USD 25 million; number of jobs created: 100

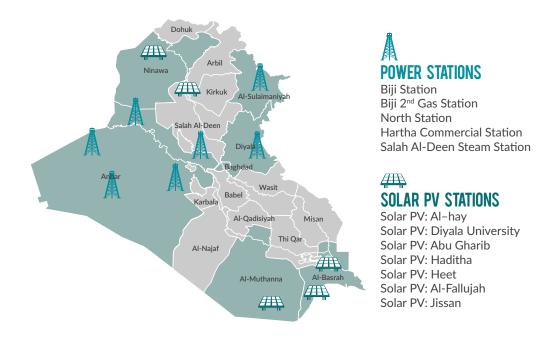
Pharmaceuticals

41) Pharmaceutical production (different capacity for variable drug) in Sulaimaniyah city

Total project area: 10,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 70

Power Sector

POWER SECTOR - 5 ELECTRICITY & 7 SOLAR PROJECTS



Power Stations

42) Biji Station

Rehabilitation of electricity station constructed by Orascom Construction Industries before the crisis with a capacity of (6 x 169 MW), project has been proposed by the ministry to be offered to investors under a ROT agreement along with PPA.

The MoE estimate that damages amounted to approx. 80% of the total project costs.

The project will be implemented through 2 phases:

Phase 1: Rehabilitation of the existing facility

Phase 2: Operations

Project Duration: 10-15 years – MoE has indicated that the project is most likely to be over 15 years.

Tariff will be dependent on fuel type, i.e. natural gas, LDO, HFO, fuel oil, gas fuel.

O&M will be implemented for the duration of the contract.

Transfer: At the end of the contract with one to three years worth of spare parts to the MoE.

Damage assessment reports: Mechanical, Civil, Electrical.

Additional Note: There was a prior period technical and financial feasibility, RFP.

The station is located in Salah Al-Deen.

43) Biji 2nd Gas Station

Rehabilitation of Beygee gas fired station with a capacity of (6 x 160) MW.

The station is located in Salah Al-Deen.

Damage assessment reports: Mechanical, Civil, Electrical.

Additional Note: There was a prior period technical and financial feasibility.

44) North Station - Thermal Power Station

Rehabilitation of existing power station with capacity of (4 x 350 MW) in Al Mowsl. There are 4 existing units on site, 2 need rehabilitation and the remaining 2 generating units have never been used, the ministry is proposing to rehabilitate the 2 generating units by utilizing both the used and unused units. A financial and technical feasibility preformed by the ministry. The station will be located in Mosul.

45) Hartha Commercial Station

Rehabilitation of existing electricity station with capacity of (200 MW) under ROT agreement and add additional 2 units with a capacity of $(2 \times 660 \text{ MW})$ through a BOT agreement.

Two separate contracts for R.O.T and B.O.T or maybe the MoE will combine both in to one contract.

Tariff: Still not agreed due to the works related to the R.O.T phase of the project, R.O.T will be over 15 years and B.O.T will be over 20 years but up for negotiation and finalization of the contract with potential investors. A prior RFP has been issued.

The station will be located in Basra

46) Salah Al-Deen Steam Station

Rehabilitation of existing power station with capacity of (2 x 610 MW). Ministry highlighted the project as one of key projects given it's in recently liberated area Salah Al-Deen and with large capacity. Ministry plans to execute the project through a 20-years BOT.

Solar PV Stations

47) Solar PV: Al-hay

Establish a PV station with capacity of (25 MW) voltage 33 KV and an extension of 3.2/3.3 km to Al-bashaer 33 KV or connect to Al-hay 33 KV station (in-out) via 2 teal overhead circuits. Project to be structured as a BOO over 15 years.

48) Solar PV: Diyala

Establish a PV station with capacity of (15 MW) voltage 33KV and to connect to Ba'quba south 132 station currently under construction via 2 overhead circuits. Project to be structured as a BOO over 15 years.

49) Solar PV: Abu Gharib

Establish a PV station with capacity of (30 MW) voltage 33 KV to be connected over 3 km to Agargoff 132 via 2 (1 x 800 mm²) underground. Project to be structured as a BOO over 15 years.

50) Solar PV: Haditha

Establish a PV station with capacity of (40 MW) voltage 132 KV to be connected over 0.25 km to Mukhliss kafi heet (1+2) (in-out) via 2 teal overhead circuits. Project to be structured as a BOO over 15 years.

51) Solar PV: Heet

Establish a PV station with capacity of (125 MW) voltage 33 KV to be connected over 4 km to one of Al-Ramadi east - Heet (1+2) (in-out) via 2 teal overhead circuits. Project to be structured as a BOO over 15 years.

52) Solar PV: Al-Fallujah

Establish a PV station with capacity of (125 MW) voltage 33 KV to be connected over 5 km to one of Habbaniyah - Al-Fallujah (1+2) (in-out) via 2 teal overhead circuits. Project to be structured as a BOO over 15 years.

53) Solar PV: Jissan

Establish a PV station with capacity of (50 MW) and voltage 33 KV with an extension of 0.5 km to Jissan 132 station via $(1 \times 800 \text{ mm}^2)$ underground cables. Project to be structured as a BOO over 15 years.

Transport Sector

TRANSPORT SECTOR - 23 PROJECTS



HIGHWAYS

Rehabilitation and Development of the 580km Baghdad-Basra highway Rehabilitation and Development of the 570km Baghdad-Mosul-Rabeea-Feshkhaboor highway Rehabilitation and Development of the 180km Baghdad-Baquba-Iranian border (Al Munthiriya) highway Construction of the 250km Baghdad-Kirkuk highway Rehabilitation of the 25km Bismaya-Baghdad-Muhamed Al Qasim highway



Rehabilitation and development of Mosul International Airport Rehabilitation and development of Nasiriya International Airport Air Cargo logistic project (150,000 ton capacity) in Erbil

RAILWAYS

New railway line (Baghdad-Basra) Rehabilitation of the existing line (Baghdad-Basra) Construction of railway line (Musaib-Semawa) Construction of Basra-Iran line Construction of railway line (Baghdad-Mosul) and branch line (Baquba-Khanaqeen-Munthiriya-Iran)



Tramway project in Erbil Tramway project in Sulaymaniyah Tramway project in Duhok

PORTS

Grand Port of Al Faw Al Faw Port Economic Zone



Baghdad Metro Baghdad Mono Rail Mono Rail in Holly Karbala Province Basra Metro

Airports

54) Rehabilitation and development of Mosul International Airport

Estimated cost before 2014: IQD 120 billion.

Estimated percentage of Damage: over 40% (based on the estimation preformed by specialized committees carried out at the end of 2017).

55) Rehabilitation and development of Nasiriya International Airport

Developing the Marshlands, and the Prophet Abraham Shrine.

Capacity: around 500 thousand passengers per year.

Target capacity: 1 million passengers per year.

Initial estimated cost: US\$ 74 million.

Buildings include: passengers terminal, runway, yard, taxi, tower, firefighting center, electricity, air conditioning systems with all devices.

56) Air cargo logistic project (150,000 ton capacity) in Erbil

Total project area: Erbil Airport; estimated investment cost: USD 50 million; number of jobs created: 300

Railways

57) New railway line (Baghdad-Basra)

New railway line (Baghdad-Kut-Umara-Basra) and branch line (Kut-Nasriya-Shuaiba-Um Qasr)

Length: 910 km

Number of lines: Dual

Axial load: 25 tons.

Passengers: 14 million per year.

Cargo: 35 million per ton.

 $Estimated \ cost: Land\ Acquisition\ US\$\,2.73\ billion.\ Execution\ US\$\,11\ billion.\ Total\ US\$\,13.73\ billion.$

58) Rehabilitation of the existing line (Baghdad - Basra)

Rehabilitation of the existing line (Baghdad –Diwaniya-Samawa-Basra)

Length: 610 km

Number of lines: Dual

Axial load: 25 tons.

Passengers: 100 million per year.

Cargo: 70 million per ton.

Estimated cost: US\$ 793 million.

59) Construction of railway line (Musaib-Semawa)

Construction of railway line (Musaib- Karbala- Najaf – Semawa)

Length: 228 km

Number of lines: Dual

Axial load: 25 tons.

Passengers: 6 million per year.

Cargo: 2 million per ton.

Estimated cost: Acquisition US\$ 750 million. Execution US\$ 2.4 billion

Total: US\$ 3.15 billion.

60) Construction of Basra - Iran line

Construction of railway line (Basra- Shalamcha – Iran line)

Length: 35 km

Number of lines: Single can be dual

Axial load: 25 tons.

Passengers: 2 million per year.

Cargo: 10 million per ton.

Estimated cost: Land Acquisition US\$ 135 million. Execution US\$ 500 million. Total US\$ 635

million.

61) Railway line (Mosul-Duhuk-Zakho-Turkey)

Length: 160 km

Number of lines: Dual

Axial load: 25 tons.

Passengers:1 million per year.

Cargo: 55 million per ton.

Estimated cost: Land Acquisition US\$ 450 billions. Execution US\$ 2.157 billion. Total US\$ 2.607

billion.

62) Construction of railway line (Baghdad-Baquba-Kirkuk-Erbil-Mosul) and branch line (Baquba-Khanaqeen-Munthiriya-Iran)

Length: 700 km

Number of lines: Multiple

Axial load: 25 tons.

Passengers: 6 million per year.

Cargo: 20 million per ton.

Estimated cost: Land Acquisition US\$1.65 billion. Execution US\$ 7 billion. Total: US\$ 8.65

billion.

Tramways

63) Tramway project in Erbil

Total project area: 60 kilometers (two lines); estimated investment cost: USD 250 million; number of jobs created: 100

64) Tramway project in Sulaymaniyah

Total project area: 60 kilometers (two lines); estimated investment cost: USD 250 million; number of jobs created: 100

65) Tramway project in Duhok

Total project area: 60 kilometers (two lines); estimated investment cost: USD 250 million; number of jobs created: 100

Ports

66) Grand Port of Al Faw

Type of project: New

Project cost: US\$ 6 billion.

Location: Basra
Design capacity:

Phase one 2018: Containers: 24 million tons per year, unpacked materials 24 million tons per year.

Phase two 2028: Containers: 40 million tons per year, unpacked materials 32 million tons per year.

Phase three 2038: Containers: 70 million tons per year, unpacked materials 44 million tons per year.

The project includes:

Eastern breakwater 8 km.

Western breakwater: 15 km.

Two lines for containers berth 3.5 km each 12 berth to each line total 24 containers berth and area for containers storage.

13 berths for unpacked materials (grains, cement..etc.), 3.5 km with conveyor belts.

Berths for Oil products export and import (outside the port basin).

Roads and railways.

Area for buildings and trucks (around 4 km²).

Navigational channel 30 km length, 17 m depth.

Berths for various goods 4.5 km (22 berths).

Industrial zone (approximately 8.5 km²).

Depth in the port basin is 15-17 m.

67) Al Faw Port Economic Zone

Suggested area 2400 ha including:

Refinery 300,000 bpd.

Petrochemicals plants 1.5m tons per year.

Tanks zone.

Power station 500 MW.

Fertilizers, cement, steel, glass plants.

Premises, services and infrastructure.

1400 ha for warehouses, housing units, training centers, commercial center.

Roads/establishing railways to Al Faw:

Improve roads leading to Basra.

Establish a pipe line and connect it with the existing one.

International investments cost for the industrial zone is US\$ 2.5 billion.

Highways

68) Rehabilitation and development of the 580km Baghdad-Basra highway

Construction of highways next to the existing ones (on the sideways). Estimated cost for the new highways is US\$ 3 million per km, while rehabilitation cost for the existing ones is US\$ 1 million per km (one third of the new one cost). Estimated cost to add 2 pathways to each side of the road is US\$ 2 million per km.

- 69) Rehabilitation and development of the 570km Baghdad-Mosul-Rabeea-Feshkhaboor highway
- 70) Rehabilitation and development of the 180 km Baghdad-Baquba-Iranian border (Al Munthiriya) highway
- 71) Construction of the 250 km Baghdad-Kirkuk highway

72) Rehabilitation of Bismaya-Baghdad-Muhamed Al Qasim highway

Rehabilitation of the 25 km Bismaya-Baghdad-Muhamed Al Qasim highway.

Building the Dora-Yousfiya road and connecting the two-story bridge with Al Dora highway Baghdad-Basra 14 km.

Building Al Madaeen Bridge (connecting Baghdad-Kut-Bismaya road to Baghdad-Basra highway passing through Madaeen) 21 km.

Subways

73) Baghdad Metro

The project consist of two lines with total length of 46 km, it has 47 stations, two locomotive garages on both lines, and three power transferring stations.

The first line (23km, 25 stations) starts from the main locomotive garage north east of Baghdad through (10×10) project location – previously, to Al Sadir city crossing Al Thawra St. heading to Baghdad center to Al Jimhoriya St. to its final destination Antar Sq.

The second line (23 km, 22 stations) starts from south east of Baghdad near Aqaba Bin Nafee Sq. – Sadoon St. City center, crossing the Tigris to reach Al Faris Al Arabi Sq. forming two branches, one to Al Mansoor and the other to Al Bayaa where the second locomotive garage is located. The project can provide comfortable and efficient transportation services to 250 thousand passenger per hour in all stations.

Ministry of Transportation contracted a number of specialized consulting companies in the midseventies to conduct a study regarding Mass Transit that resulted to using tracks according to the feasible study done in 1978 (Feasibility study and Preliminary Design of an integrated Transport System within the City of Baghdad).

A contract was signed with Sestra Co. (French), one of the specialized international companies, to conduct the initial designs and the tender documents under the title (Technical, Legal and Contractual Requirement for Baghdad Metro Project).

The estimated cost of the project including detailed designs and execution of the two lines excluding extensions is € 5.7billion which is roughly US\$ 6 billion according to the French Co. feasible study adding to that US\$ 2 billion for acquisitions, total cost will be US\$ 8 billion. EPC document was based on turnkey delivery system.

74) Baghdad Mono Rail

A vital project with good financial revenues, prepared by French Alstom Co.

Estimated cost: US\$ 1.5 billion.

Duration: 5 years

Project purpose: To solve traffic jams and improve services in Baghdad.

Phases, locations, implementation lines in Baghdad.

Phase one: 15.5 km, Kadhmiya-Al Sadir City-Shaab, with 12 internal station and crossing the

Tigris.

Phase two: 4.45 km, the International Station in Alawi-Utaifiya with two internal stations.

75) Mono Rail in Holly Karbala Province

This project is considered to be one of the major strategic projects in Holly Karbala Province for its importance in resolving the transportation problem of visitors coming to the Holly city. The project starts from the station Bada'at Aswad in Al-Husainiya District and going toward the

Baghdad road taking the middle path of the main road toward Bab Twerej and passing through Al-Salam bridge and then through Al-Ibrahimiya station.

Length: 18 km Dual line, 20 passengers stations.

Estimated cost: US\$ 450 million.

76)Basra Metro

This project is considered to be one of the major strategic projects in Basra Province for its importance in resolving the transportation problem.

The metro contains 5 main lines with 35 main and branch lines.

First line: Sa'ad square-Basra University-can be extended to the city center.

Second line: Sa'ad square-Zubair-can be extended to Safwan.

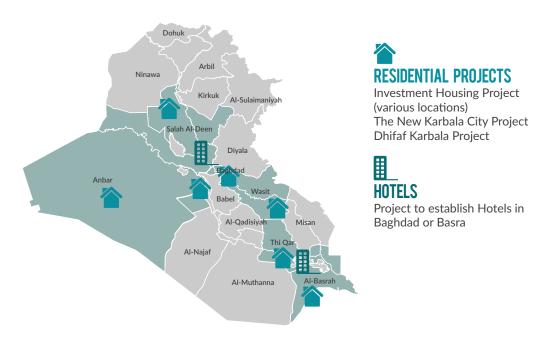
Third line: Sa'ad-Al-Ashar-Shalamja.

Fourth line: Sa'ad square-Abu Al-Khaseeb-Faw.

Fifth line: Sa'ad square-14th July street-presidential palaces.

Real Estate Sector

REAL ESTATE SECTOR - 4 PROJECTS



Housing

77) Investment Housing Project (various locations)

For low/medium income citizens in addition to low cost housing for limited income people including the infrastructure (water, electricity, sewage, gas and telecommunication). An economic design was selected for the Investment Housing Project in Maysan Province 2017 to build 4,000 housing units in Umara City.

78) The New Karbala City Project

Area: 15 million m², it includes 136 various investment opportunities. Establishing an integrated city in terms of services (vertical and horizontal housing units-hotels-shopping center-educational sector-recreational-sport-banks-Islamic science office-conference hall).

Karbala Downtown Development: Area: 750 dunam near the holly shrines, could be developed into housing complex, multi-storey garage, commercial center and tourists areas.

79) Dhifaf Karbala Project

Estimated cost: US\$ 6 billion.

40 thousand housing units as phase one aiming at 85 thousand in addition to commercial centers, recreational centers and social services.

Hotels

80) Project to establish Hotels in Baghdad or Basra

Health and Education Sector

HEALTH AND EDUCATION SECTOR - 18 PROJECTS



RESEARCH CENTRES

Building a Research and Manufacturing Center Specialized in Solar Cells. An integrated Agricultural Incubator (for research purposes) Advanced Technological Incubator for Internationally Developed Technologies

UNIVERSITY HOSPITALS

Karbala University Hospital Mosul University Hospital Ibn Sina University Hospital University Hospital in Anbar province Build a 400-bed Teaching Center in (Kirkuk, Wasit al-Muthanna) Build a Cyclotron for Cancer Therapy Build a University Teaching Hospital in Babylon Province Build a University Teaching Hospital in Baghdad

Ō PRIVATE HOSPITALS

Build Hospital with 400 bed capacity

Build Hospital with 400 bed capacity - Haditha

Build General Hospital with 100 bed capacity in Baghdad

Build General Hospital with 100 bed capacity with furniture and equipment

- Baghdad

Establish Specialized Hospital with furniture and equipment - Wasit Build 400 beds hospital in Diwanya



University Hospitals

81) Karbala University Hospital

600 bed capacity/partially finished in different percentages.

82) Mosul University Hospital

600 bed capacity/partially finished in different percentages.

83) Ibn Sina University Hospital

600 bed capacity/partially finished in different percentages. (Baghdad)

84) Build a University Hospital in Anbar Province

Project description: Build a University Hospital with a bed capacity to be determined later, located at the University it includes different medical specialties based on the latest international standards on a piece of land (area: $250,000 \,\mathrm{m}^2$).

Project objective: Providing medical services for people as well as providing job opportunities along with being used for educational purposes.

Location: Al-Ramadi.

85) Build a University Hospital (Kirkuk, Wasit, and Al-Muthanna)

400 beds capacity.

86) Build a cyclotron for cancer therapy

Project description: Build small cyclotron along with its small nuclear facilities and connect it to the existing (Pet Scan) device at Al-Nahrain University.

Project objective: To provide an integrated service to examine cancer patients, once its provided it will be the only place in Iraq that provide such service in addition to being used for educational purposes.

87) Build a University Teaching Hospital in Babylon Province

Project description: The project includes building a University Teaching Hospital on a piece of land (17,500 m²).

Project objective: To provide medical services in accordance with latest international standards along with being used for educational purposes.

Location: Hilla.

88) Build a University and Teaching Hospital in Baghdad

Project description: Build a university that focuses on medical specialties in addition to establishing a public hospital on a piece of land $(17,500 \text{ m}^2)$.

Project objective: To build a new university by creating a twinning programs with international universities through investment as well as providing various medical services by building a public university hospital and also to be used for teaching purposes.

Location: Baghdad.

Private Hospitals and Medical Centres

89) Build Hospital in Wasit

400 beds capacity.

90) Build Hospital in Haditha

400 beds capacity.

91) Build General Hospital in Baghdad (1)

100 beds capacity.

92)Build General Hospital in Baghdad (2)

100 beds capacity, with the need to provide with furniture and equipment.

93) Establish Specialized hospital with furniture and equipment, Wasit

94) Hospital in Diwanya

400 beds capacity.

95) Public Hospital

400 bed capacity/ in Kut/ partially finished in different percentages.

Research Centres

96) Building a Research and Manufacturing Centre specialized in Solar Cells

Project description: Constructing a center for research and manufacturing producing solar cells on a piece of land.

Project objective: To supply the market with solar cells in order to provide clean alternative energy that protect the environment to be utilized in scientific research.

Location: Baghdad.

97) An Integrated Agricultural Incubator (for research purposes)

Project description: Raising bulls, slaughter house, meat canning factory, poultry farm (eggs and meat), hatchery, feed stock factory, animal sperm production center, veterinary injections center, veterinary hospital, a farm for raising cows (milk production), dairy factory, agricultural fields for green feed, honey production, laboratories, tissue culture and other facilities related to the project on a piece of land (area: 1,200 dunam which equals 3 million m²).

Project Objective: To provide the market with animal products (meat, eggs, dairy products, honey and feedstock), in addition to other agricultural services and create job opportunities.

Location: Baghdad.

98) Advanced Technological Incubator for Internationally Developed Technologies

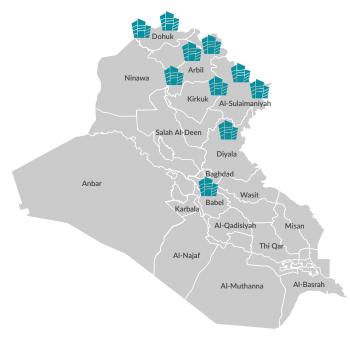
Project description: The project focus on implementing innovations and patents in addition to providing developed technologies and intelligent technology in educational institutions in Iraq on a piece of land (area: 10 dunam which equals 25000 m²).

Project objective: To sponsor the innovator and creators of ideas as well as to develop the intelligent education in Iraq.

Location: Baghdad.

Tourism Sector

TOURISM SECTOR - 10 PROJECTS



HOTELS AND RESORTS

Recreational zone in Diyala (the old camp near Al Khalis, Himreen, and Udhaim lakes).

Rehabilitation and development of Habaniya resort, and build a new resort in Razaza Lake

Modern Tourism Complex according to general master plan of Board of Tourism in Erbil

Modern Tourism Complex according to general master plan of Board of Tourism in Sulaimaniyah

Modern Tourism Complex according to general master plan of Board of Tourism in Duhok

Airport 5 star hotel in Erbil Airport 5 star hotel in Sulaimaniyah Tourism Hotel & Restaurant (5+ stars) in Erbil

Tourism Hotel & Restaurant (5+ stars) in Sulaimaniyah

Tourism Hotel & Restaurant (5+ stars) in Duhok

Touristic and Recreational Areas

99) Recreational Zone in Diyala (the old camp near Al Khalis, Himreen and Udhaim Lakes)

Located near Al Khalis town and Al Udhaim Dam and Himreen Dam Lakes, plot no. 87/Q 77 50 km north of Baquba city.

The location connects with the north of Iraq and Turkey from one side and Baghdad from the other side, it is also close to Al Mansoriya airport and the gas field in the area in addition to Himreen and Udhaim lakes.

100) Rehabilitation and Development of Habaniya resort and build a new resort in Razaza Lake

Area: 16,000 dunam on the shores of Habaniya lake.

The project includes renewing the hotel and 200 Chalet with modern architectural requirements, Luna Park and marina, restaurants and a large tent. The lake beach should be developed in accordance with international standards. The estimated cost for the first phase of the project is US\$ 25 million.

It is intended to expand the town activities to include tourism, culture and media centers aiming

to make it suitable for art and cultural festivals by providing a climate suitable for these activities throughout the year, therefore the rehabilitation plan should include closed and open theaters, halls, guest houses, cinemas, media city, and TV channels.

101) Modern Tourism Complex according to general master plan of Board of Tourism in Erbil

Total project area: 50,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 70

102) Modern Tourism Complex according to general master plan of Board of Tourism in Duhok

Total project area: 50,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 70

103) Modern Tourism Complex according to general master plan of Board of Tourism in Sulaimaniyah

Total project area: 50,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 70

104) Airport 5 star hotel in Erbil

Total project area: 5,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 50

105) Airport 5 star hotel in Sulaimaniyah

Total project area: 5,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 50

106) Tourism Hotel & Restaurant (5+ stars) in Erbil

Total project area: 20,000 sqm; estimated investment cost: USD 24 million; number of jobs created: 250

107) Tourism Hotel & Restaurant (5+ stars) in Sulaimaniyah

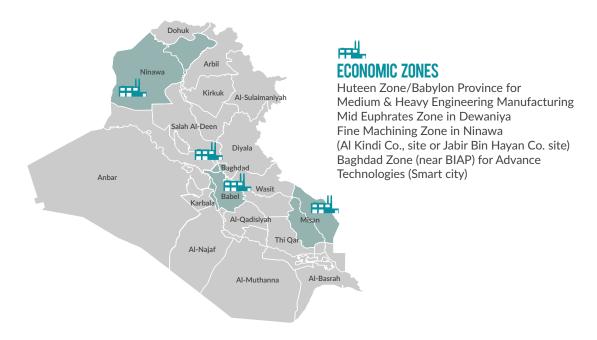
Total project area: 20,000 sqm; estimated investment cost: USD 24 million; number of jobs created: 250

108) Tourism Hotel & Restaurant (5+ stars) in Duhok

Total project area: 20,000 sqm; estimated investment cost: USD 24 million; number of jobs created: 250

Economic Zones

ECONOMIC ZONE - 4 PROJECTS



Economic Zones

109) Huteen Zone/Babylon Province for medium and heavy engineering manufacturing

Huteen is located in Babylon Province/Eskandariya city near the State Co. for Mechanical Industries and the State Co. for Automobiles.

40 km to the north of Hilla city center, 50 km to Baghdad city center.

550 km to Basra city and its ports.

10 km east to the Euphrates.

12 km to the north of Al Musaiab thermo electricity station.

Total area is 15,000,000 m², around 6,000 dunam in addition to branch streets within the site.

Sewage, water pipes, electricity and facilities are available with limited damages.

45 big area warehouses protected with earth embankment for highly immunized products.

110) Mid Euphrates Zone in Dewaniya

1,500 dunam for agricultural industries (agro-industry) including dairy products, fruits, vegetables and meat processing and canning.

111) Fine Machining zone in Nineveh (Al Kindi Co., site or Jabir Bin Hayan Co. site).

One of the sites to be selected to produce machinery and equipment for medium and small projects such as valves and pumps.

112) Baghdad zone (near BIAP) for advance technologies (Smart city).

The smart city shall provide various activities for interested people in information technology, entertainment and social technologies. It also includes a training center, weekly gathering of professionals and specialists, meetings and scientific debates halls, computer courses for children, restaurant and coffee shop, markets for electronic devices, internet services center, a training center to develop human skills, a museum for communication devices and post stamps representing Iraq's history, halls for investing companies, halls for simulating modern training technologies, a hotel for the visitors and many other services.

Commercial Sector

COMMERCIAL SECTORS - COUNTRYWIDE PROJECTS

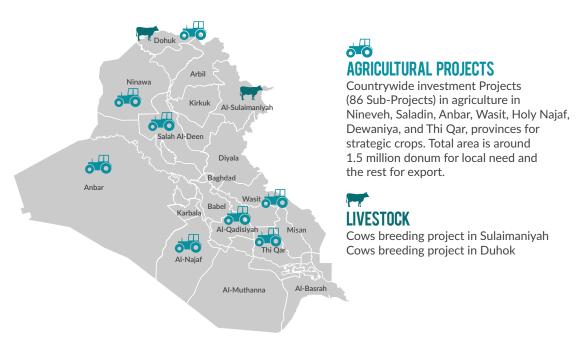


COMMERCIAL PROJECTS

Construction of (12) Silos (grain storage) with flour mills in different provinces with a storage capacity of 60 thousands ton to 100 thousand ton each noting that there are special areas allocated for this purpose.

Agriculture Sector

AGRICULTURAL SECTOR - 88 PROJECTS



Agricultural Projects

Attached all details for Investment Projects in agriculture in Ninawa, Salah Al-Deen, Anbar, Wasit, Holy Najaf, Dewaniya, and Thi Qar, provinces for strategic crops. Total area is around 1.5 million dunam for local need and the rest for export.

 Table 1: The Number and Area of Investment Opportunities in Iraqi Provinces for 2017-2018

Province	Number of Opportunities	Total Area for Investment (dunam)
Ninawa	3	8,300
Salah Al-Deen	7	23,255
Anbar	5	245,415
Wasit	36	395,148
Holy Najaf	1	700,000
Dewaniya	24	91,188
Thi Qar	10	29,908
Total	86	1,493,214

Livestock

211) Cows breeding project in Sulaimaniyah

Total project area: 125,000 sqm; estimated investment cost: USD 50 million; number of jobs created: 450

212) Cows breeding project in Duhok

Total project area: 125,000 sqm; estimated investment cost: USD 50 million; number of jobs created: 450

Figure 1: Agricultural Investment Opportunities in Ninawa 2017-2018

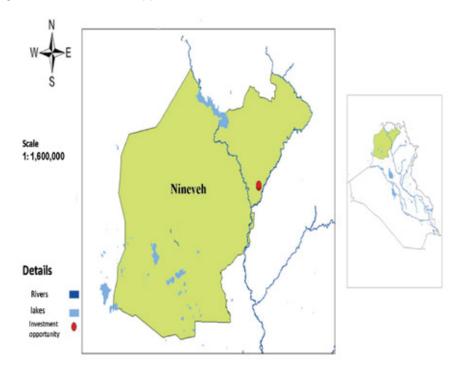
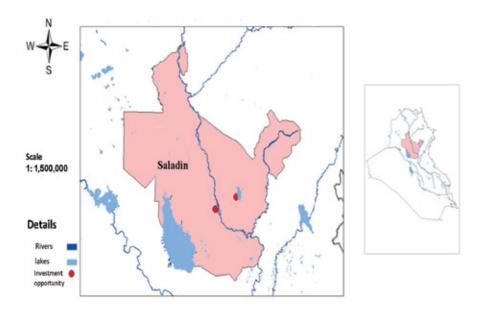


Table 2: Predisposing Land for Agricultural Investment in Ninawa Province for 2017-2018

Seq.	1	2	3	No. of Opportunities
District/Township	Singar-Center	Sinjar/Al Qairawan	Singar-Center	3
County No./ Plot No.	1/18 Sito	1/2/19 Um Al Shababeet	18/85 Sinjar Mountain	Total Area
Area (dunam)	200	100	8,000	8,300
Type	Rocky/Woods			
Availability of Water Source	Not Available/ Wells	Not Available/ Wells	Not Available/ Wells	
Ground Waters Depth	Less than 100m	80-100m	100-120m	
Soil Analysis (pH Type)	9.6 Gypsum	9.7 Gypsum	8.5 Calcic	
Ground Water Validity	2500 Milimo sz	More than 2000 Milimo sz	Less than 2000 Milimo sz	
Location from Irrigation Projects	90 km from Al Jezeera	90 km from Al Jezeera	90 km from Al Jezeera	
Coordinates XY	X: 429180 Y 3621550	X: 429100 Y: 3621500	X: 442000 Y: 3621410	
Notes	Allocated for Livestock Projects	Allocated for Livestock Projects	Allocated for Woods	

Figure 2: Agricultural Investment Opportunities in Salah Al-Deen 2017-2018



Note: 5 investment opportunities with unavailable Coordinates

Table 3: Predisposing Land for Agricultural Investment in Salah Al-Deen Province for 2017-2018

Seq.	1	2	3	4	5	6	7
District/Township	Tikrit/ Al Alem	Aldoor	Aldoor	Al Dejail	Al Dejail	Tikrit	Samara/Dijla
County No./ Plot No.	1/52 Al Akooz	47-48-49-50- 71/78 Swaida	97/74 Um Jidah	1/14-23/Al Jezeera	80/8 Qanater Abo Al Hassan	1/9 Al Jezeera	40,11 Al Mijtala
Area (dunam)	1,800	10,000	5,000	3,000	15	2,000	1,440
Туре	Agriculture	Agriculture -Sandy	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of	Not Available/	Not Available/	Not Available/	Not Available/	Not Available/	Not Available/	Not Available/
Water Source	Wells	Wells	Wells	Wells	Wells	Wells	Wells
Ground Waters Depth/Validity	100m	100m	100m	4m/suitable	25m/ unsuitable	100m	100m
Soil Analysis (pH Type)	-	-	-	Sandy	Muddy	-	701 Gypsum
Location from Irrigation Projects	-	-	-	Far	Far	-	Far
Coordinates XY	-	-	X: 415159 Y: 32025297	-	-	-	X: 388648 Y: 3790605
Notes	Currently Oil and Military Zone	Currently Military Zone	Currently Military Zone	Currently Military Zone	Currently Military Zone	Currently Military Zone	Currently Military Zone
No. of Opportunities	7						
Total Area	23,255						

Figure 3: Agricultural Investment opportunities in Anbar 2017-2018

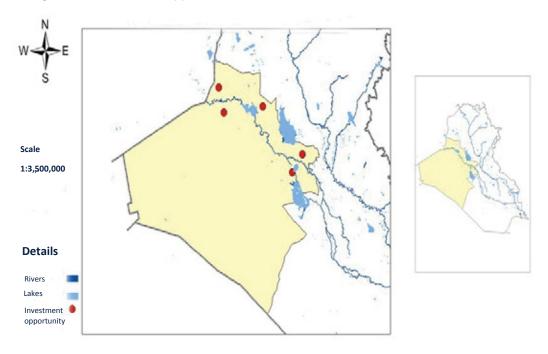


Table 4: Predisposing land for Agricultural Investment in Anbar Province for 2017-2018

Seq.	1	2	3	4	5
District/Township	Qaem	Qaem	Hdeetha	Al Khalidiyahl Habaniya	Faluja/ Saqlawiya
County No./ Plot No.	24/Kalban Al- Tayara/1/49 22/dayoom Al-Der/27	20/Western Dayoom Jibab/43	71/Dayoom the middle island/1	47/Haswat Al- Shamiyah/2	36/Al- Jabal/4/5094
Area (dunam)	107,200	116,000	14,000	1,215	7,000
Туре	Desert Lands	Desert Lands	Desert Lands	Rocky Lands	Desert Lands
Availability of Water Source	Unavailable	Unavailable	Unavailable Underground Waters	Unavailable Underground Waters	Unavailable Underground Waters
Method of Irrigation	-	-	Wells	Wells	Wells
Ground Waters Depth/Validity	-	-	30m Invalid	15m (salty) 25m (less salty) Invalid	Shallow Invalid
Soil Analysis (pH Type)	7.78 Mixed sandy	7.27 Mixed	6.66 Mixed Sandy	7.65 Mixed Sandy	8.4 Mixed Clay Sandy
Location from Irrigation Projects	Outside	Outside	Outside	Outside	Outside
Coordinates XY	X: 166909 Y: 3843882	X: 179951 Y: 3793720	X: 0279047 Y: 3805631	X: 0353717 Y: 3673662	X: 0379659 Y: 3709765
Notes	-	-	-	-	High gypsum rate 42%
No. of Opportunities	5				
Total Area	245,415				

Details

Investment opportunity

Rivers Lakes

Scale 1:1,200,000

Figure 4: Agricultural Investment opportunities in Wasit 2017-2018

Table 5: Predisposing land for Agricultural Investment in Wasit Province for 2017-2018

Seq.	1	2	3	4	5	6	7
District/Township	Azezia Centre	Azezia Centre	Essouira Al Zobaidia	Nu'mania Centre	Nu'mania Centre	Badra Jassan	Badra Jassan
County No./ Plot No.	34/Jazera 191/1	23/Jazera 67/1	13/Saysabana 6/1	33 Jezera 1/46	30 Bezaiz & 32 Jazera 9/2 and 1/10	21/Mweleh 1	27/Jazera 1/18
Area (dunam)	5,932	5	12	5,900	95	3,600	100,000
Type	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of Water Source	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Source of Water	-	-	-	-	-	-	-
Soil Analysis (pH Type)	3.8 Clay	7.6 Clay	7.4 Clay	7.6 Clay	-	7.3 Clay	Clay
Method of Irrigation	Means	Means	Means	Means	Means	Wells	Wells
Coordinates XY	X: 524392 Y: 3664083	X: 509036 Y: 3647530	X: 512318 Y: 3619156	X: 548086 Y: 3627869	X: 526682 Y: 3596068	X: 576889 Y: 3636937	X: 576362 Y: 3633511
Notes	-	Area reduced from 35-5	-	-	-	-	-

Seq.	8	9	10	11	12	13	14
District/Township	Badra Centre	Badra Centre	Badra Zurbatia	Kut Shekh Sa'ad	Kut Shekh Sa'ad	Kut Shekh Sa'ad	Kut Shekh Sa'ad
County No./ Plot No.	33/Al Hor 2/6	16 Saijla & Sabkha 1	16 Saijla & Sabkha 3	8 Hashema 8	46 Ramadan Ajer 1	45 Ramadan Ajer 1	38 Sayed Mohamed
Area (dunam)	49,000	800	30,000	33,000 & 1,200 Sporadic	26,200	11,470	832
Type	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of Water Source	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Source of Water	-	-	-	-	-	-	-
Soil Analysis (pH Type)	8.5-8.4 Celtic Clay	7.2 Celtic Clay	7.6 Clay	7.6 Celtic Clay	7.3 Celtic Clay	7.7 Mixed	7.3 Clay
Method of Irrigation	Wells	Wells	Wells	Wells	Means	Means	Means
Coordinates XY	X: 577358 Y: 3629557	X: 584743 Y: 3665664	X: 584143 Y: 3665664	X: 578816 Y: 3662630	X: 632612 Y: 3606647	X: 634482 Y: 3612307	X: 633713 Y: 3619964
Notes	-	-	-	750 dunam saved for cement factory exclluded	-	Promote Ema Co. papers (Brazil)	Promote Ema Co. papers (Brazil)

Seq.	15	16	17	18	19	20	21
District/Township	Kut Shekh Sa'ad	Kut Centre	Alhay Mowafaqia	Kut Dejela	Kut Dejela	Kut Dejela	Al Hay Centre
County No./	45 um Al Jaradi	30 Shwaija 325	22 Tarat Efaj	5 Hamedia &	15 Hor Kharab	15 Hor Kharab	24 Khamesia
Plot No.	1	1 116 to 129/1	1/14	Jalebia 7/2	5	7/6	1/8
Area (dunam)	20,501	59,555	1,050	6	4,725	9,155	120
Type	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of Water Source	Unavailable	Unavailable	Available	Available	Available	Available	Unavailable
Source of Water	-	-	-	-	-	-	-
Soil Analysis	7.4-8.5	7.4	7.1-7.8	7.7	7.6	7.8	7.5
(pH Type)	Sandy Clay	Clay	Celtic Clay	Celtic Clay	Celtic Clay	Celtic Clay	Clay
Method of Irrigation	Means	Means	Means	Means	Means	Means	Means
Coordinates XY	X: 637531	X: 559703	X:0587302	X: 623184	X: 0638113	X: 644943	X: 576655
Coordinates 201	Y: 3628153	Y: 3620412	Y: 3573905	Y: 3591212	Y: 3553540	Y: 3543497	Y: 3629257
	Promote Ema						
Notes	Co. papers	-	-	-	-	-	-
	(Brazil)						

Seq.	22	23	24	25	26	27	28
District/Township	Al Azizia Al Deboni	Kut Shekh Sa'ad	Al Azizia Al Azizia	Al Azizia Al Azizia	Badra Zurbatia	Kut Centre	Numaniya Ahrar
County No./ Plot No.	34 Jazera 1/191	31/Salty Ramth 2/1	34 Jazera 191/1	34 Jazera 191/1	8/Hashima 8	30 Shiwaija 325/1	5/Abo Jabir 316/1
Area (dunam)	8,000	900	966	1,600	70	513	1
Туре	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of Water Source	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Available
Source of Water	-	-	-	-	-	-	-
Soil Analysis (pH Type)	7.6 Clay	-	-	-	-	-	-
Method of Irrigation	Means	Means	Means	Means	Means	Means	Means
Coordinates XY	X: 535543 Y: 3637694	X: 618302 Y: 3636154	X: 578129 Y: 3660399	-	X: 587071 Y: 3693372	X: 576796 Y: 3607743	-
Notes	-	-	-	Palestine revelation lands approved to be announced as an investment opportunity	-	-	Mushroom project

Seq.	29	30	31	32	33	34	35
District/Township	Numaniya Ahrar	Al Azizia Zubaidia	Al Azizia Debino	Al Sewara Taj Al Deen	Al Azizia Al Azizia	Kut Shekh Sa'ad	Kut Shekh Sa'ad
County No./ Plot No.	42/Fhayl 4/1	10/Sharqi Taweel 5/2	29 Western Shadheef 10/32 11/32 12/32 13/32	21 Al Jezeera 401/1	34 Al Jezeera 191/1	1/Al Uoja 1	45/Ramadan Ajir 39 Al Beda 38 Gheriba East 1
Area (dunam)	500	200	980	1,700	1,600	1,000	12,920
Type	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of Water Source	Unavailable	Unavailable	Unavailable	Available	Available	Available	Available
Source of Water	-	-	-	-	-	-	-
Soil Analysis (pH Type)	-	-	-	-	-	-	-
Method of Irrigation	Means	Means	Means	Means	Means	Means	Means
Coordinates XY	X: 558313 Y: 3552496	X: 516584 Y: 3620203	X: 515937 Y: 3630776	X: 495399 Y: 3665820	-	X: 603046 Y: 367112	X: 624625 Y: 3610196
Notes	-	-	-	Run by State real-estate office, now investment opportunity	Palestine revolution land, now granted for investment	-	-

Seq.	36
District/Township	Kut Shekh Sa'ad
County No./ Plot No.	1 15 West Masnak 16 East Masnak
Area (dunam)	3,040
Type	Agriculture
Availability of Water Source	-
Source of Water	Tigris River
Soil Analysis (pH Type)	7.5 Mixed
Method of Irrigation	Means
Coordinates XY	X: 629690 Y: 3588401
Notes	-
No. of Opportunities	36
Total Area	395,148

Figure 5: Agricultural Investment opportunities in Holy Najaf 2017-2018

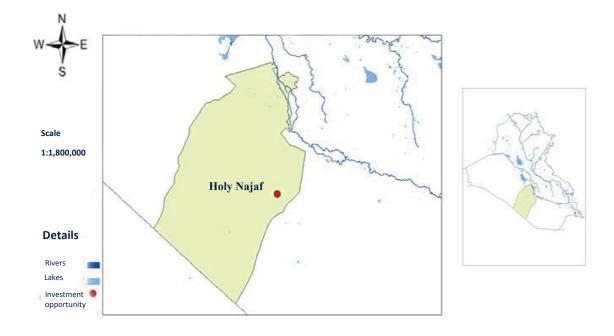


Table 6: Predisposing land for Agricultural Investment in Najaf

Seq.	1
District/Township	Najaf Shabaka
County No./ Plot No.	1/1
Area (dunam)	70,000
Type	Agriculture
Availability of Water Source	Available
Source of Water	Share of Water is not available
Soil Analysis (pH Type)	7.5-6.5 Method interspersed with some flooding and areas of gypsum
Method of Irrigation	Groundwater
Coordinates XY	X: 440000 Y: 3427000
Notes	Enough water
No. of Opportunities	1
Total Area	70,000

Figure 6: Agricultural Investment opportunities in Diwaniyah 2017-2018

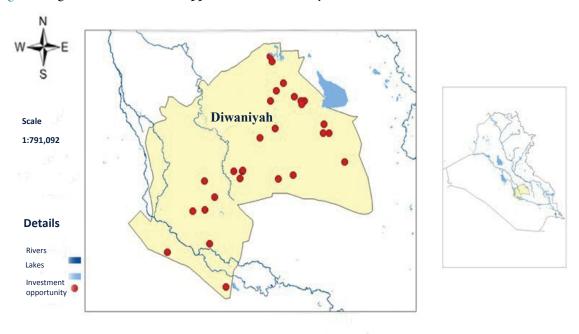


Table 7: Predisposing land for Agricultural Investment in Diwaniyah Province for 2017-2018

Seq.	1	2	3	4	5	6	7
District/Township	Afak Afak	Afak Afak	Afak Afak	Al Hamza Al Shanafya	Al Hamza Al Shanafya	Al Hamza Al Shanafya	Al Hamza Al Hamza
County No./ Plot No.	26 Afak 1/1	26 Afak 1/1	26 Afak 1/1	3/Al Masudia 23/1	6/Al Akrokiya 1	11/Al Rekbaniya 1	8 Aziz Alla 1/10
Area (dunam)	3,000	950	425	1,725	1,099	6,000	399
Туре	Agriculture						
Availability of Water Source	Unavailable	Unavailable	Unavailable	Available	Available	Unavailable	Available
Source of Water	Wells	Wells	Wells	Euphrates	Euphrates	Underground waters	Irrigations Channels
Soil Analysis (pH Type)	8.1 Mixed	8.1 Mixed	8.1 Mixed	7.8 Clay	7.8 Sandy	7.9 Sandy	8.4 Clay
Validity of underground waters	-	-	-	Invalid	Valid	Valid	Invalid
Depth of underground water	-	-	-	-	-	40-50m	-
Method of Irrigation	Wells	Wells	Wells	Wells	Surface Irrigation	Wells	Surface Irrigation
Coordinates XY	X: 524392 Y: 3664083	X: 509036 Y: 3647530	X: 512318 Y: 3619156	X: 548086 Y: 3627869	X: 526682 Y: 3596068	X: 576889 Y: 3636937	X: 576362 Y: 3633511
Location	Outside	Outside	Outside	-	-	-	-
Notes	-	Area reduced from 35-5	-	-	-	-	-

Seq.	8	9	10	11	12	13	14
District/Township	Al Hamza Al Hamza	Al Hamza Al Sadeer	Al Hamza Al Shanafya	Afak Nefer	Afak Nefer	Afak Nefer	Afak Nefer
County No./ Plot No.	Abo Hasheesh/9 2/10	6/Imam Al Deen 1/34	10 Hor Alla 313	27/Shat Al Nile 1	25/Al Badaa 1/9	14/Alwa and Antakiya 20/9	27/Shat Al Nile 6
Area (dunam)	590	3,000	3,300	1,266	732	182	5,100
Type	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of Water Source	Available	Available	Available	Unavailable	Unavailable	Unavailable	Available
Source of Water	Irrigations Channels	Irrigations Channels	Euphrates	General Water Point	General Water Point	Underground water	Irrigations Project
Soil Analysis (pH Type)	7.9 Clay	8.1 Clay	7.8 Mixed	8 Mixed Clay	8.2 Mixed Clay	8 Mixed Clay	8.2-10 Mixed Clay
Validity of underground waters	Invalid	Invalid	Valid	Invalid	Invalid	Invalid	Invalid
Depth of underground water	-	-	5m	5-8m	5-8m	8m	8m
Method of Irrigation	Surface Irrigation	Surface Irrigation	Means	Wells	Wells	Wells	Surface Irrigation
Coordinates XY	X: 494766 Y: 3502203	X: 484515 Y: 3516400	X: 520875 Y: 3575450	X: 522420 Y: 3542450	X: 526800 Y: 3564760	X: 514240 Y: 3537800	X: 523123 Y: 35610783
Location	-	-	-	-	-	-	-
Notes	-	Area reduced from 35-5	-	-	-	-	-

Seq.	15	16	17	18	19	20	21
District/Township	Afak Nefer	Al Hamza Al Shanafya	Al Hamza Al Sadeer	Al Hamza Al Sadeer	Al Hamza Al Sadeer	Afak Al Bdair	Afak Al Bdair
County No./ Plot No.	27/Shat Al Nile 6	12/Al Asra 1/136/436	2/Al Dehaya 1/24 1/24	2/Al Dehaya 9	2/Al Dehaya 1/7 6/7	13 Al Bdair 4/2	12 Al Bdair 7 & 16
Area (dunam)	1,000	26,680	27,317	27,317 147		2,650	4,800
Туре	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of Water Source	Available	Unavailable	Available	Available	Available	Unavailable	Unavailable
Source of Water	Irrigations Project	Wells	Irrigations Channels	Irrigations Channels	Irrigations Channels	Irrigations Channels	Irrigations Channels
Soil Analysis (pH Type)	7.9 Mixed Clay	Sandy	7.2 Mixed Clay	7.8 Clay	7.8 Sandy	7.9 Sandy	8.4 Clay
Validity of underground waters	Invalid	Invalid	Valid	Valid	Valid	Invalid	Invalid
Depth of underground water	8m	40-50m	6m	-	-	-	-
Method of Irrigation	Surface Irrigation	Surface Irrigation	Means	Means	Means	Means	Means
Coordinates XY	X: 520050 Y: 3555950	X: 464626 Y: 3481395	X: 504900 Y: 3521200	X: 500326 Y: 3521300	X: 505125 Y: 3521812	X: 548160 Y: 3540230	X: 548621 Y: 3544520
Location	-	-	-	-	-	-	-
Notes	-	12km to city 3km to road	-	-	-	Third river no man land	Third river no man land

Seq.	22	23	24	25	26	27
District/Township	Afak Al Bdair	Afak Al Bdair	Al Hamza Al Sadeer	Al Hamza Al Sadeer	Al Hamza Al Sadeer	Afak Al Bdair
County No./ Plot No.	16 Al Bdair 13	13 Al Bdair 27/2	2 Al Dehaya Parts of 12/33 & 3/33 all of 6/33	2 Al Dehaya 9	2 Al Dehaya 1/7 6/7	13 Al Bdair 4/2
Area (dunam)	1,900	10	500	147	166	2,650
Type	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture
Availability of Water Source	Unavailable	Unavailable	Available	Available	Available	Unavailable
Source of Water	Irrigations Channels	Unavailable	Irrigations Channels	Irrigations Channels	Irrigations Channels	Irrigations Channels
Soil Analysis (pH Type)	7.9 Mixed Clay	Sandy	7.2 Mixed Clay	7.8 Clay	7.8 Sandy	7.9 Sandy
Validity of underground waters	Invalid	Invalid	Invalid	Valid	Valid	Invalid
Depth of underground water	-	-	-	-	-	-
Method of Irrigation	Means	Means	Means	Means	Means	Means
Coordinates XY	X: 551390 Y: 3540230	X: 559768 Y: 3525935	X: 503720 Y: 3517640	X: 500326 Y: 3521300	X: 505125 Y: 3521812	X: 548160 Y: 3540230
Location	-	-	-	-	-	-
Notes	Third river no man land	Chilled warehouses	-	-	-	Third river no man land
No. of Opportunities	24					
Total Area	91,188					

Figure 7: Agricultural Investment opportunities in Thi Qar 2017-2018

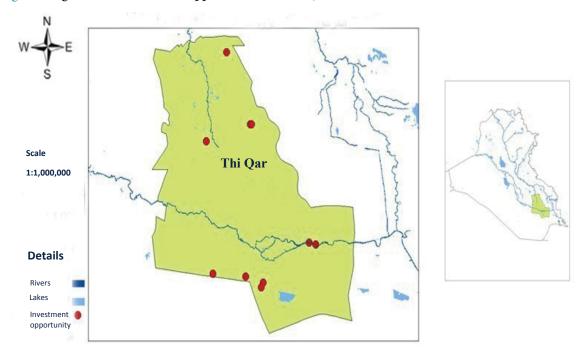


Table 8: Predisposing land for Agricultural Investment in Thi Qar Province for 2017-2018

Seq.	1	2	3	4	5	6	7
District/Township	Chibaesh Manar	Chibaesh Manar	Shatra Daweiya	Shatra Daweiya	Shatra	Al Rifaee Sukar Castle	Nasiriya Center
County No./ Plot No.	10 Alboshama 1	2 Khawema 1	4 Hataman 7/7	30 Al Ghadeen 11	12 Al Hijia 157	20 Um Al Kata 299, 1, 2,3,10,9,5,2	8 Al Hazim 9 Salibiya 48 Sakhriya Part of 1
Area (dunam)	1,000	300	1,000	5,000	2,008	2,000	15,000
Туре	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Agriculture	Governmental Medium Fertility
Availability of Water Source	Available	Available	Available	Available	Available	Available	Available
Source of Water	Al Gharraf River	Al Gharraf River	Al Gharraf River	Al Gharraf River	Al Gharraf River	Al Gharraf River	Ibada river out of Al Huriya river
Soil Analysis (pH Type)	7.47 Mixed	7.05 Sandy Mixed	7.64 Mixed Sandy	70.74 Mixed Sandy	7 Mixed Sandy	7.6 Mixed Sandy	7.1 Sandy
Method of Irrigation	Pumps	Pumps	Pumps	Pumps	Pumps	Pumps	Pumps
Coordinates XY	X: 3425089 Y: 677896	X: 3426170 Y: 673460	X: 3492542 Y: 633624	X: 3492682 Y: 634281	-	X: 3532969 Y: 6174434	X: 608038 Y: 3408705

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List of Projects by Sectors

OIL

1) New Refinery in Al Faw

- Construction of new refinery in Al Faw Port with capacity of 300 thousand bpd.
- Al Faw

2) New Refinery in Anbar

• Construction of a refinery in Anbar Province with a production capacity of 150 thousand bpd.

3) New Refinery in Thi-Qar

Construction of new Al-Nasiria refinery in Thi Qar Province with a production capacity of 150
thousand bpd. (its proposed to be built on the basis of BOT or BOO system according to the
amended law of refining crude oil numbered 64 for the year 2007)

4) Rehabilitation of Doura Refinery

5) Rehabilitation of Basra Refinery

6) Bin Omar field for crude oil in Basra Province

• With a design capacity of 22x66000 m³ (first phase) and 9x66000 m³ (second phase).

7) Mosul field for Petroleum Products

• Gasoline 4x10000 m3, Diesel Fuel 3x10000 m³ and Kerosene 3x10000 m³ in Mosul Province.

8) Tuba field for Petroleum Products

• Gasoline 4x20000 m³, Diesel Fuel 2x20000 m³, Kerosene 3x10000 m³ and Jet fuel 2x50000 m³ in Basra Province.

9) Aziziya field for Petroleum Products

• Gasoline 2x10000 m³, Diesel Fuel 1x10000 m³ and Kerosene 1x10000 m³ in Kut.

10) Samara'a field for Petroleum Products

• Gasoline 4x2500 m³, Diesel Fuel 2x5000 m³ and Kerosene 2x5000 m³ in Saladin Province.

11) Sea water supply project in Basra

• Project of supplying the joint sea water in Basra Province with expected capacity of 5 million barrel/day.

INDUSTRIAL

12) Rehabilitation of white cement plants in Fallujah

- Area: 642,000 sqm
- Production capacity: 290,000 ton/year for the two lines. Production capacity can be increased to 350,000 ton/year
- Cost for Rehabilitating and operating is USD 12.8 million
- Experienced staff is available to operate the plant. The plant (which is the only one in Iraq that produces white cement) is not working at the present time. Cement plants in Kubaisa, Qaim, in Anbar and Badoosh, Sinjar, Hamam Al Alil in Mosul are going through damage assessment by special committees (for the damages that occurred during 2014-2017).

13) Rehabilitation and development of white cement plants in Anbar

• Currently going through damage assessment, for damages incurred from 2014-2017.

14) Rehabilitation and development of white cement plants in Mosul

• Currently going through damage assessment, for damages incurred from 2014-2017.

15) Rehabilitation and development of engineering plants

• Al Nassir and Al Simood Co., Ibn Majid, The Heavy engineering equipment Co. (Ministry of Oil) and The Mechanical industries in Eskandariya to cover the needs of the oil & gas, electricity and heavy industries sectors for tanks, heat exchangers, valves, pipes, pumps, poles and cranes and other products the rehabilitation and development of these factories require new production lines as well as supporting infrastructure.

16) Caustic Soda Project

- Production of caustic soda, chlorine, Hypochlorite and Hydrochloric in Samawa
- Area: 50 dunam
- Production capacity: 40-50 ton/day
- Estimated cost : USD 40 million

17) Sodium Carbonate project

- Production of Sodium Carbonate and Bicarbonate in Samawa
- Area: 100 dunam
- Production capacity: 50,000 ton/year
- Estimated cost: USD 50-60 million

18) Sodium Sulfate project

- Production of Sodium Sulfate in Samawa
- Area: 25 dunam
- Production capacity: 10 ton/ day
- Estimated cost: USD 20 Million

19) Acid and alkaline factories

- Construction of Acid and alkaline factories at the sites of Al-Furat General Company
- Concentrated Sulfuric acid: 24,750 ton/year
- Aluminum Sulphate: 16,500 ton/year

20) Petrochemical plants in Al-Faw

• Production of Liquid hydrocarbon products in Al- Faw Peninsula, 1,500 ton/year of Ethylene

21) Polypropylene production plant

- Production: 650 ton/year of propylene
- Location: Al- Faw Peninsula (or west of Qurna)
- Estimated cost: USD 1.9 billion

22) Petrochemical plants in Basra

- Production: first phase- 1,200 ton/year of Ethylene
- Second phase- Aromatics Concentrate
- Location: Basra Province
- Cost, capital payback and profits to be determined according to investor's feasibility study

23) Rehabilitation and development of glass plants in Ramadi

- Multipurpose raw glass (13 type of glass), such as glass for buildings, automobile and mirrors
- Iraq's need for float glass is doubling annually. The current estimate of 1,500 ton/day covers the local market. The unique location of the plant is suitable for exporting this product to the neighboring countries as raw or final product.
- Target production capacity: 500,000 ton/year to be divided into two phases according to market capacity and required types.
- Annual production cost in full capacity to produce 700 ton/day is around IQD 94 billion.

24) Float Glass factories in Karbala and Muthana provinces (2 projects)

25) Rehabilitation of existing fertilizer plant in Baiji and the implementation of new production lines (for export)

- Production of 500 ton of Urea fertilizer
- Estimated capital: USD 0.5 billion
- The plant is operated by LPG supplied by the North Co. in Kirkuk Province. 9 MW Generators are available to provide electricity for operation.
- The ministry stopped operating the plant on 1/1/2014 due to difficult circumstances in Saladin Province.
- The plant has 1,165 workers
- About 60% of the plant is damaged.

26) Reconstruction and development of fertilizer plant in Abu Al Khaseeb (for export)

 Plant history: The plant consist of two production lines, the old production line produced Urea granules 200 ton/day in addition to Sulfuric Acid and Ammonium Phosphate. This plant was

- completely destroyed during the war in the eighties. The second plant was established in 1973 and completed in 1976, designed to produce Urea fertilizer 420 thousand metric ton/y.
- Location: the plant is located on Shat Al Arab next to Abo Floos River and near Abu Al Khaseeb town, 25km south of Basra in southern Iraq.
- Infrastructure: The plant is close to the main road connecting Basra to the other cities
- Available raw materials such as natural gas
- Close to a big river as a source of water
- Most of the raw materials are locally available, such as natural gas (40 million cubic feet/day is required) if operated according to design capacity.
- Design Capacity: Ammonium plant capacity is 800 metric ton/day /Urea plant capacity 1,300 metric ton/day (420 thousand metric ton/year)
- Target capacity: present design capacity (or according to investor's suggestion)
- Raw materials availability: essential raw material is natural gas which is locally available.
- Estimated cost for rehabilitation: approximately USD 250 million (IQD 300 billion)

27) New production lines for fertilizer plant in Khor Al Zubair (for export)

- Production of 500 ton of Urea fertilizer
- Expected capital: USD 0.5 billion
- Return on Investment rate: (according to the investor's feasible study and estimations)

28) Rehabilitation and development of phosphate plant in Qaim and the Ukashat mine (for local demand and export)

 Damages due to occupation (2014-2017) is to be estimated by local committees with the Ministry of Industry and Minerals. Technical and financial information for rehabilitation shall be based on recommendations of the joint committees.

29) Production and processing of certified seeds project in Duhok

• Total project area: 25,000 sqm; estimated investment cost: USD 3 million; number of jobs created: 500

30) Fruit juice factory in Halabja city

• Total project area: 12,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 45

31) Tomato paste factory in Duhok

• Total project area: 10,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 50

32) Grape juice factory in Duhok

• Total project area: 12,000 sqm; estimated investment cost: USD 3 million; number of jobs created: 35

33) Vegetable oil factory in Erbil

• Total project area: 12,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 45

34) Vegetable oil factory in Sulaymaniyah

• Total project area: 12,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 45

35) Vegetable oil factory in Duhok

• Total project area: 12,000 sqm; estimated investment cost: USD 4 million; number of jobs created: 45

36) Dairy products & ice cream factory in Erbil

• Total project area: 30,000 sqm; estimated investment cost: USD 10 million; number of jobs created: 75

37) Dairy products & ice cream factory in Sulaimaniyah

• Total project area: 30,000 sqm; estimated investment cost: USD 10 million; number of jobs created: 75

38) Dairy products & ice cream factory in Duhok

• Total project area: 30,000 sqm; estimated investment cost: USD 10 million; number of jobs created: 75

39) Bus and mini bus assembly in Erbil city

• Total project area: 100,000 sqm; estimated investment cost: USD 25 million; number of jobs created: 100

40) Farm tractor and agriculture machines assembling in Sulaimaniyah city

• Total project area: 100,000 sqm; estimated investment cost: USD 25 million; number of jobs created: 100

41) Pharmaceutical production (different capacity for variable drug) in Sulaimaniyah city

• Total project area: 10,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 70

ELECTRICITY

42) Biji station

- Rehabilitation of electricity station constructed by Orascom Construction Industries before the
 crisis with a capacity of (6 X 169 MW), project has been proposed by the ministry to be offered
 to investors under a ROT agreement along with PPA.
- The MoE estimate that damages amounted to approx. 80% of the total project costs.
- The project will be implemented through 2 phases:
- Phase 1: Rehabilitation of the existing facility
- Phase 2: Operations
- Project Duration; 10-15 years MoE has indicated that the project is most likely to be over 15 years.
- Tariff; will be dependent on fuel type, i.e. natural gas, LDO, HFO, fuel oil, gas fuel.
- O&M- will be implemented for the duration of the contract.
- Transfer- At the end of the contract with one to three years worth of spare parts to the MoE.
- Damage assessment reports: -Mechanical , Civil, Electrical. Additional Note: There was a prior period technical and financial feasibility , RFP
- The station is located in Salahdeen

43) Biji 2nd gas station

- Rehabilitation of Biji gas fired station with a capacity of (6 X 160) MW
- The station is located in Salahdeen
- Damage assessment reports: -Mechanical , Civil, Electrical. Additional Note: There was a prior period technical and financial feasibility

44) North station - thermal power station

Rehabilitation of existing power station with capacity of (4 X 350 MW) in Al Mowsl. There are 4
existing units on site, 2 need rehabilitation and the remaining 2 generating units have never been
used, the ministry is proposing to rehabilitate the 2 generating units by utilizing both the used
and unused units. A financial and technical feasibility preformed by the ministry. The station will
be located in Mosul

45) Hartha commercial station

- Rehabilitation of existing electricity station with capacity of (200 MW) under ROT agreement and add additional 2 units with a capacity of (2 X 660 MW) through a BOT agreement
- Two separate contracts for R.O.T and B.O.T or maybe the MoE will combine both in to one contract.
- Tariff; still not agreed due to the works related to the R.O.T phase of the project ,R.O.T will be over 15 years and B.O.T will be over 20 years but up for negotiation and finalization of the contract with potential investors. A prior RFP has been issued.
- The station will be located in Basra

46) Salaheldin steam station

• Rehabilitation of existing power station with capacity of (2 X 610 MW). Ministry highlighted the project as one of key projects given it's in recently liberated area Salaheldin and with large capacity. Ministry plans to execute the project through a 20-years BOT

SOLAR

47) Solar PV: Al - hay

• Establish a PV station with capacity of (25 MW) voltage 33KV and an extension of 3.2/3.3 km to Al-bashaer 33KV or connect to Al-hay 33KV station (in-out) via 2 teal overhead circuits. Project to be structured as a BOO over 15 years.

48) Solar PV: Diyala

• Establish a PV station with capacity of (15 MW) voltage 33KV and to connect to Ba'quba south 132 station currently under construction via 2 overhead circuits. Project to be structured as a BOO over 15 years.

49) Solar PV: Abu Gharib

• Establish a PV station with capacity of (30 MW) voltage 33KV to be connected over 3km to Agargoff 132 via 2 (1 X 800mm2) underground. Project to be structured as a BOO over 15 years.

50) Solar PV: Haditha

• Establish a PV station with capacity of (40 MW) voltage 132KV to be connected over 0.25 km to Mukhliss kafi heet (1+2) (in-out) via 2 teal overhead circuits. Project to be structured as a BOO over 15 years.

51) Solar PV: Heet

• Establish a PV station with capacity of (125 MW) voltage 33KV to be connected over 4 km to one of Ramadi east - Heet (1+2) (in-out) via 2 teal overhead circuits. Project to be structured as a BOO over 15 years.

52) Solar PV: Fallujah

• Establish a PV station with capacity of (125 MW) voltage 33KV to be connected over 5 km to one of Habbaniyah - Fallujah (1+2) (in-out) via 2 teal overhead circuits. Project to be structured as a BOO over 15 years.

53) Solar PV: Jissan

• Establish a PV station with capacity of (50 MW) and voltage 33KV with an extension of 0.5 km to Jissan 132 station via (1 X 800mm2) underground cables. Project to be structured as a BOO over 15 years.

TRANSPORTATION

54) Rehabilitation and development of Mosul International Airport

- Estimated cost before 2014: IQD 120 billion
- Estimated percentage of Damage: over 40% (based on the estimation preformed by specialized committees carried out at the end of 2017).

55) Rehabilitation and development of Nasiriya International Airport

- Developing the Marshlands, and the Prophet Abraham Shrine.
- Capacity: around 500 thousand passenger/y
- Target capacity: 1 million passengers/y
- Initial estimated cost: USD 74 million
- Buildings include: passengers terminal, runway, yard, taxi, tower, firefighting center, electricity, air conditioning systems with all devices.

56) Air cargo logistic project (150,000 ton capacity) in Erbil

 Total project area: Erbil Airport; estimated investment cost: USD 50 million; number of jobs created: 300

57) New railway line (Baghdad-Basra)

- New railway line (Baghdad-Kut-Umara-Basra) and branch line (Kut-Nasriya-Shuaiba-Um Qasr)
- Length: 910km

- Number of lines: dual
- Axial load: 25 ton
- Passengers: 14 (million/year), Cargo: 35 (million/ton).
- Estimated cost: Land Acquisition: USD 2.7 billion, execution: USD 11.0 billion, Total: USD 13.7 billion

58) Rehabilitation of the existing line (Baghdad - Basra)

- Rehabilitation of the existing line (Baghdad –Diwaniya-Samawa- Basra)
- Length: 610km
- Number of lines: dual
- Axial load: 25 ton
- Passengers: 100 (million/year), Cargo: 70 (million/ton).
- Estimated cost: USD 793 million

59) Construction of railway line (Musaib – Semawa)

- Construction of railway line (Musaib- Karbala- Najaf Semawa)
- Length: 228km
- Number of lines: dual
- Axial load: 25 ton
- Passengers: 6 (million/year), Cargo: 2 (million/ton).
- Estimated cost: Land Acquisition USD 750 million, Execution USD 2.4 billion, Total USD 3.2 billion.

60) Construction of Basra - Iran line

- Construction of railway line (Basra- Shalamcha Iran line)
- Length: 35km
- Number of lines: single can be dual
- Axial load: 25 ton
- Passengers : 2 (million/year), Cargo : 10 (million/ton)
- Estimated cost : Land Acquisition USD 135 million, Execution USD 500 million, Total USD 635 million

61) Railway line (Mosul-Dohuk-Zakho-Turkey)

62) Construction of railway line (Baghdad-Baquba-Kirkuk-Erbil-Mosul) and branch line (Baquba-Khanaqeen-Munthiriya-Iran)

- Length: 700 km
- Number of lines: multiple
- Axial load: 25 ton
- Passengers: 6 (million/year), Cargo: 20 (million/ton)
- Estimated cost : Land Acquisition USD 1.7 billion, Execution USD 7 billion, Total USD 8.7 billion.
- Length: 160km
- Number of lines: dual

- Axial load: 25 ton
- Passengers :1 (million/year), Cargo : 55 (million/ton)
- Estimated cost: Land Acquisition USD 450 million, Execution, USD 2.2 billion, Total USD 2.6 billion

63) Tramway project in Erbil

• Total project area: 60 kilometers (two lines); estimated investment cost: USD 250 million; number of jobs created: 100

64) Tramway project in Sulaymaniyah

• Total project area: 60 kilometers (two lines); estimated investment cost: USD 250 million; number of jobs created: 100

65) Tramway project in Duhok

• Total project area: 60 kilometers (two lines); estimated investment cost: USD 250 million; number of jobs created: 100

66) Grand Port of Al Faw

- Type of project: new
- Project cost: USD 6b
- Location: Basra
- Design capacity:
- Phase one 2018: containers: 24 million ton/year, unpacked materials/24 million ton/year
- Phase two 2028: containers: 40 million ton/year, unpacked materials/ 32 million ton/year
- Phase three 2038: containers: 70 million ton/year, unpacked materials/ 44 million ton/year
- The project includes:
- Eastern breakwater 8km
- Western breakwater 15km
- Two lines for containers berth 3.5km each 12 berth to each line total 24 containers berth and area for containers storage.
- 13 Berths for unpacked materials (grains, cement..etc.) 3.5km with conveyor belts
- Berths for Oil products export and import (outside the port basin)
- Roads and railways
- Area for buildings and trucks (around 4km²)
- Navigational channel 30km length, 17m depth.
- Berths for various goods 4.5km (22berths)
- industrial zone (approximately 8.5km²)
- depth in the port basin is 15-17 m

67) Al Faw Economic Zone Port

- Suggested area 2400 ha including:
- Refinery 300000 bpd
- petrochemicals plants 1.5m ton/year
- tanks zone

- power station 500MW
- fertilizers, cement, steel, glass plants
- premises, services and infrastructure
- 1400 ha for warehouses, housing units, training centers, commercial center.
- Roads/ establishing railways to Al Faw:
- Improve roads leading to Basra
- Establish a pipe line and connect it with the existing one.
- International investments cost for the industrial zone is USD 2.5 billion

68) Rehabilitation and development of the 580km Baghdad-Basra highway

• Construction of highways next to the existing ones (on the sideways). Estimated cost for the new highways is USD 3m /km, while rehabilitation cost for the existing ones is USD 1m/km (one third of the new one cost). estimated cost to add 2 pathways to each side of the road is USD 2m/km.

69) Rehabilitation and development of the 570km Baghdad-Mosul- Rabeea- Feshkhaboor highway

70) Rehabilitation and development of the 180km Baghdad-Baquba- Iranian border (Al Munthiriya) highway

71) Construction of the 250km Baghdad-Kirkuk highway

72) Rehabilitation of Bismaya- Baghdad- Muhamed Al Qasim highway

- Rehabilitation of Bismaya- Baghdad- Muhamed Al Qasim highway, 25km
- Building the Dora- Yousfiya road and connecting the two –story bridge with Al Dora highway Baghdad- Basra 14km
- Building Al Madaeen Bridge (connecting Baghdad -Kut- Bismaya road to Baghdad- Basra highway passing through Madaeen) 21 km

73) Baghdad Metro

- The project consist of two lines with total length of 46km. it has 47 station, two locomotive garages on both lines, and three power transferring stations.
- The first line (23km 25 station) starts from the main locomotive garage north east of Baghdad through (10*10) project location previously, to Al Sadir city crossing Al Thawra St. heading to Baghdad center to Al Jimhoriya St. to its final destination Antar Sq.
- The second line (23km 22 stations) starts from south east of Baghdad near Aqaba Bin Nafee Sq.

 Sadoon St. City center, crossing the Tigris to reach Al Faris Al Arabi Sq. forming two branches, one to Al Mansoor and the other to Al Bayaa where the second locomotive garage is located. The project can provide comfortable and efficient transportation services to 250 thousand passenger/h in all stations.
- Ministry of Transportation contracted a number of specialized consulting companies in the midseventies to conduct a study regarding Mass Transit that resulted to using tracks according to the feasible study done in 1978 (Feasibility study and Preliminary Design of an integrated Transport

System within the City of Baghdad)

- A contract was signed with Sestra Co. (French), one of the specialized international companies, to conduct the initial designs and the tender documents under the title (Technical, Legal and Contractual Requirement for Baghdad Metro Project)
- The estimated cost of the project including detailed designs and execution of the two lines excluding extensions is USD 5.7 billion which is roughly USD 6 billion according to the French Co. feasible study adding to that USD 2 billion for acquisitions, total cost will be USD 8 billion. EPC document was based on turnkey delivery system.

74) Baghdad Mono Rail

- A vital project with good financial revenues, prepared by French Alstom Co.
- Estimated cost: USD 1.5 billion
- Duration: 5 years
- Project purpose: to solve traffic jams and improve services in Baghdad.
- Phases, locations, implementation lines in Baghdad
- Phase one: 15.5 km, Kadhmiya- Al Sadir City- Shaab, with 12 internal station and crossing the Tigris
- Phase two: 4.45km, the International Station in Alawi- Utaifiya with two internal stations.

75) Mono Rail in Holly Karbala Province

- This project is considered to be one of the major strategic projects in Holly Karbala Province for its importance in resolving the transportation problem of visitors coming to the Holly city. The project starts from the station Bada'at Aswad in Al-Husainiya District and going toward the Baghdad road taking the middle path of the main road toward Bab Twerej and passing through Al-Salam bridge and then through Al-Ibrahimiya station.
- Length: 18 km/ dual line/ 20 passengers stations.
- Estimated cost: USD 450 million

76) Basra Metro

- This project is considered to be one of the major strategic projects in Basra Province for its importance in resolving the transportation problem.
- The metro contains 5 main lines with 35 main and branch lines
- First line: Sa'ad square- Basra University-can be extended to the city center.
- Second line: sa'ad square-Zubair-can be extended to Safwan
- Third line: Sa'ad-Al-Ashar-Shalamja
- Fourth line: Sa'ad square-Abu Al-Khaseeb-Faw
- Fifth line: Sa'ad square-14th July street-presidential palaces.

REAL ESTATE

77) Investment Housing Project (various locations)

• Building 25,000 housing units in each province for low/ medium income citizens in addition

to low cost housing for limited income people including the infrastructure (water, electricity, sewage, gas and telecommunication). An economic design was selected for the Investment Housing Project in Maysan Province 2017 to build 4,000 housing units in Umara City.

78) The New Karbala City Project

- Area 15 million sqm, it includes (136) various investment opportunities. Establishing an integrated city in terms of services (vertical and horizontal housing units-hotels-shopping center-educational sector-recreational-sport-banks-Islamic science office-conference hall).
- Karbala Downtown Development(area: 750 dunam) near the holly shrines, could be developed into housing complex, multi-storey garage, commercial center and tourists areas.

79) Dhifaf Karbala Project

- 40 thousand housing units as phase one aiming at 85 thousand in addition to commercial centers, recreational centers and social services.
- Estimated cost: USD 6 billion

80) Project to establish Hotels in Baghdad or Basra

HEALTH AND EDUCATION

81) Karbala University Hospital

• 600 bed capacity/ partially finished in different percentages

82) Mosul University Hospital

• 600 bed capacity/ partially finished in different percentages.

83) Ibn Sina University Hospital

• 600 bed capacity/ partially finished in different percentages. (Baghdad)

84) Build a University Hospital in Anbar Province

- Project description: build a University Hospital with a bed capacity to be determined later, located at the University it includes different medical specialties based on the latest international standards on a land area 250,000 sqm.
- Project objective: providing medical services for people as well as providing job opportunities along with being used for educational purposes.
- Location: Ramadi

85) Build a University Hospital (Kirkuk, Wasit, and Al-Muthanna)

• 400 beds capacity

86) Build a cyclotron for cancer therapy

• Project description: build small cyclotron along with its small nuclear facilities and connect it to the existing (Pet Scan) device at Al-Nahrain University.

Project objective: to provide an integrated service to examine cancer patients, once its provided
it will be the only place in Iraq that provide such service in addition to being used for educational
purposes.

87) Build a University Teaching Hospital in Babylon Province

- Project description: the project includes building a University Teaching Hospital on a piece of land 17,500 sqm.
- Project objective: to provide medical services in accordance with latest international standards along with being used for educational purposes.
- Location: Hilla

88) Build a University and Teaching Hospital in Baghdad

- Project description: build a university that focuses on medical specialties in addition to establishing a public hospital on a piece of land (17500) sqm.
- Project objective: to build a new university by creating a twinning programs with international universities through investment as well as providing various medical services by building a public university hospital and also to be used for teaching purposes.
- Location: Baghdad

89) Build Hospital in Wasit

• 400 beds capacity

90) Build Hospital in Haditha

• 400 beds capacity

91) Build General Hospital in Baghdad (1)

• 100 beds capacity

92) Build General Hospital in Baghdad (2)

• 100 beds capacity, with the need to provide with furniture and equipment

93) Establish Specialized fully equipped hospital, Wasit

94) Hospital in Diwanya

• 400 beds capacity

95) Public hospital

• 400 bed capacity in Kut, partially finished in different percentages

96) Building a research and manufacturing center specialized in solar cells

- Project description: constructing a center for research and manufacturing producing solar cells on a piece of land.
- Project objective: to supply the market with solar cells in order to provide clean alternative energy that protect the environment to be utilized in scientific research.
- Location: Baghdad

97) An integrated agricultural incubator (for research purposes)

- Project description: raising bulls, slaughter house, meat canning factory, poultry farm (eggs and meat), hatchery, feed stock factory, animal sperm production center, veterinary injections center, veterinary hospital, a farm for raising cows (milk production), dairy factory, agricultural fields for green feed, honey production, laboratories, tissue culture and other facilities related to the project on a piece of land (area: 1200) dunam which equals 3 million sqm.
- Project Objective: to provide the market with animal products (meat, eggs, dairy products, honey and feedstock), in addition to other agricultural services and create job opportunities.
- · Location: Baghdad

98) Advanced Technological incubator for internationally developed technologies

- Project description: the project focus on implementing innovations and patents in addition to providing developed technologies and intelligent technology in educational institutions in Iraq on a piece of land (area: 10) dunam which equals 25,000 sqm.
- Project objective: to sponsor the innovator and creators of ideas as well as to develop the intelligent education in Iraq.
- · Location: Baghdad

TOURISM

99) Recreational zone in Diyala (the old camp near Al Khalis + Himreen and Udhaim lakes)

- \bullet Located near Al Khalis town and Al Udhaim Dam and Himreen Dam Lakes, plot no. 87/ Q 77 50km north of Baquba city.
- The location connects with the north of Iraq and Turkey from one side and Baghdad from the other side, it is also close to Al Mansoriya airport in addition to Himreen and Udhaim lakes

100) Rehabilitation and development of Habaniya resort and build a new resort in Razaza Lake

- Area: 16,000 donum on the shores of Habaniya lake.
- The project includes renewing the hotel and 200 Chalet with modern architectural requirements, Luna Park and marina, restaurants and a large tent. The lake beach should be developed in accordance with international standards. The estimated cost for the first phase of the project is USD 25 million.
- It is intended to expand the town activities to include tourism, culture and media centers aiming to make it suitable for art and cultural festivals by providing a climate suitable for these activities throughout the year, therefore the rehabilitation plan should include closed and open theaters, halls, guest houses, cinemas, media city, and TV channels.

101) Modern Tourism Complex according to general master plan of Board of Tourism in Erbil

• Total project area: 50,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 70

102) Modern Tourism Complex according to general master plan of Board of Tourism in Duhok

• Total project area: 50,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 70

103) Modern Tourism Complex according to general master plan of Board of Tourism in Sulaimaniyah

• Total project area: 50,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 70

104) Airport 5 star hotel in Erbil

• Total project area: 5,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 50

105) Airport 5 star hotel in Sulaimaniyah

• Total project area: 5,000 sqm; estimated investment cost: USD 20 million; number of jobs created: 50

106) Tourism Hotel & Restaurant (5+ stars) in Erbil

• Total project area: 20,000 sqm; estimated investment cost: USD 24 million; number of jobs created: 250

107) Tourism Hotel & Restaurant (5+ stars) in Sulaimaniyah

• Total project area: 20,000 sqm; estimated investment cost: USD 24 million; number of jobs created: 250

108) Tourism Hotel & Restaurant (5+ stars) in Duhok

• Total project area: 20,000 sqm; estimated investment cost: USD 24 million; number of jobs created: 250

INVESTMENT ZONE

109) Huteen zone/Babylon Province for medium & heavy engineering manufacturing

- Huteen is located in Babylon Province/ Eskandariya city near the State Co. for Mechanical Industries and the State Co. for Automobiles.
- 40 km to the north of Hilla city center, 50 km to Baghdad city center.
- 550 km to Basra city and its ports
- 10 km east to the Euphrates
- 12 km to the north of Al Musaiab thermo electricity station
- Total area is 15,000,000 sqm, around 6,000 donum in addition to branch streets within the site.
- Sewage, water pipes, electricity and facilities are available with limited damages.
- 45 big area warehouses protected with earth embankment for highly immunized products.

110) Mid Euphrates zone in Dewaniya

• 1,500 donum for agricultural industries (agro- industry) including dairy products, fruits, vegetables and meat processing and canning.

111) Fine Machining zone in Nineveh (Al Kindi Co., site or Jabir Bin Hayan Co. site)

• One of the sites to be selected to produce machinery and equipment for medium and small projects such as valves and pumps.

112) Baghdad zone (near BIAP) for advance technologies (Smart city)

• The smart city shall provide various activities for interested people in information technology, entertainment and social technologies. It also includes a training center, weekly gathering of professionals and specialists, meetings and scientific debates halls, computer courses for children, restaurant and coffee shop, markets for electronic devices, internet services center, a training center to develop human skills, a museum for communication devices and post stamps representing Iraq's history, halls for investing companies, halls for simulating modern training technologies, a hotel for the visitors and many other services.

COMMERCIAL

• 113-124) Construction of (12) Silos (grain storage) with flour mills in different provinces with a storage capacity of 60 thousands ton to 100 thousand ton each noting that there are special areas allocated for this purpose.

AGRICULTURE

125-210) Agriculture Projects

• Investment Projects in agriculture in Nineveh, Saladin, Anbar, Wasit, Holy Najaf, Dewaniya, and Thi Qar, provinces for strategic crops. Total area is around 1.5 million donum for local need and the rest for export.

Province	Number of Opportunities	Total Area for Investment (dunam)	
Ninawa	3	8,300	
Salah Al-Deen	7	23,255	
Anbar	5	245,415	
Wasit	36	395,148	
Holy Najaf	1	700,000	
Dewaniya	24	91,188	
Thi Qar	10	29,908	
Total	86	1,493,214	

211) Cows breeding project in Sulaimaniyah

• Total project area: 125,000 sqm; estimated investment cost: USD 50 million; number of jobs created: 450

212) Cows breeding project in Duhok

• Total project area: 125,000 sqm; estimated investment cost: USD 50 million; number of jobs created: 450