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August 28, 2015

Closing Date: Friday, September 18, 2015 at 6 p.m.

FROM: The Acting Corporate Secretary

Jordan

First Programmatic Energy and Water Sector Reforms

Development Policy Loan

Program Document

Attached is the Program Document regarding a proposed First Programmatic Energy and Water Sector Reforms Development Policy Loan to Jordan (R2014-165), which is being processed on an absence-of-objection basis.

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Report No. 94786-JO

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT FOR A PROPOSED LOAN

IN THE AMOUNT OF US$250 MILLION

TO THE

HASHEMITE KINGDOM OF JORDAN

FOR A

FIRST PROGRAMMATIC ENERGY AND WATER SECTOR REFORMS DEVELOPMENT POLICY LOAN

AUGUST 17, 2015

Energy and Extractives Global Practice and Water Global Practice
Middle East and North Africa Region

Hashemite Kingdom of Jordan

FIRST PROGRAMMATIC ENERGY AND WATER SECTOR REFORMS DEVELOPMENT POLICY LOAN

GOVERNMENT FISCAL YEAR
January 1 – December 31

CURRENCY EQUIVALENTS
(Exchange Rate Effective as of July 22, 2015

US$ 1 = JD 0.7090
JD 1 = US$ 1.410

ABBREVIATION AND ACRONYMS

AFD	*Agence Française de Développement* (French Development Agency)
ASEZA	Aqaba Special Economic Zone Authority
CBJ	Central Bank of Jordan
CPS	Country Partnership Strategy
DisCos	Distribution Companies
DPL	Development Policy Loan
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EMRC	Energy and Minerals Regulatory Commission
FSRU	Floating Storage and Regasification Unit
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GFMIS	Government Financial Management Information System
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit*
HFO	Heavy Fuel Oil
IMF	International Monetary Fund
IPP	Independent Power producer
JD	Jordanian Dinar
JREEF	Jordanian Renewable Energy and Efficiency Fund
KFW	KFW Development Bank
kWh	Kilowatt Hour
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MCM	Million Cubic Meter
MoF	Ministry of Finance
MoPIC	Ministry of Planning and International Cooperation
MoEMR	Ministry of Energy and Mineral Resources
MoWI	Ministry of Water and Irrigation
MTEF	Medium-Term Expenditure Framework
NEEAP	National Energy Efficiency Action Plan
NEPCO	National Electricity Power Company
PFM	Public Finance Management
REEE	Renewable Energy and Energy Efficiency
OCGT	Open Cycle Gas Turbine

SBA	Standby Arrangement
SUBSIM	Subsidy Simulation Module
TSA	Treasury Single Account
USAID	United States Agency for International Development
USD	United States Dollar
WAJ	Water Authority of Jordan
yoy	Year-Over-Year

Vice President:	Hafez M. H. Ghanem
Country Director:	Ferid Belhaj
Senior Global Practice Director:	Anita Marangoly George
Practice Manager:	Charles Joseph Cormier
Task Team Leaders:	Husam Mohamed Beides
	Caroline van den Berg
	Ferhat Esen

HASHEMITE KINGDOM OF JORDAN

FIRST PROGRAMMATIC ENERGY AND WATER SECTOR REFORMS
DEVELOPMENT POLICY LOAN

TABLE OF CONTENTS

This DPL was prepared by a team led by Husam Beides (MNC02), Caroline van den Berg (GWADR) and Ferhat Esen (GEEDR) and comprised of Iyad Rammal (GWADR), Wissam Harake (GMFDR), Lea Hakim (GMFDR), Africa Eshogba Olojoba (GENDR), Concepcion Aisa Otin (FABBK), Setareh Razmara (GSPDR), Jad Raji Mazahreh (GGODR), Maya Abi Karam (LEGAM), Evarist Baimu (LEGAM), Tania Meyer (MNC02), Mark Njore (GEEDR) and Nada Abou-Rizk (MNC02).

LOAN AND PROGRAM SUMMARY

HASHEMITE KINGDOM OF JORDAN

FIRST PROGRAMMATIC ENERGY AND WATER SECTOR REFORMS
DEVELOPMENT POLICY LOAN

Borrower	Hashemite Kingdom of Jordan
Implementing Agency	Ministry of Planning and International Cooperation
Financing Data	IBRD Loan Amount: US$ 250 million. The Loan terms are as follows: IBRD Variable Spread Loan of US$250,000,000 (in US Dollars) payable in 35 years (including a grace period of five years). The front-end fee equal to one quarter of one percent of the loan amount would be financed from the loan proceeds.
Operation Type	First single tranche operation of a programmatic series of two consecutive Development Policy Loans (DPL).
Pillars of the Operation And Program Development Objectives (PDOs)	The objective of the DPL is to improve the financial viability and increase efficiency gains in the energy and water sectors in Jordan. The policy program supported by the DPL will be structured around two pillars: (i) improving the financial viability of the electricity and water sectors; and (ii) increasing efficiency gains in the energy and water sectors.
Result Indicators	**Pillar 1: Improving the financial viability of the electricity and water sectors** • Achieving electricity tariff cost recovery is measured by the cost recovery level of the end user tariffs: Baseline (2014): The electricity tariff cost recovery is 56 percent. Target (2017): The electricity tariff cost recovery is 100 percent. • Resolving the National Electricity Power Company's (NEPCO's) debt is measured by the development and implementation of a Debt Management Plan for NEPCO: Baseline (2014): NEPCO's debt servicing is managed through the budget and there is no specific NEPCO Debt Management Plan in place. Target (2017): NEPCO's Debt Management Plan under implementation and 2017 debt reduction target is achieved. • Achieving operation and maintenance water cost recovery is measured by operation and maintenance cost recovery level in the water sector (defined as the Water Authority of Jordan (WAJ) and the three regional water companies): Baseline (2013): Cost recovery is 86 percent. Target (2017): Cost recovery is 100 percent. **Pillar B: Increasing efficiency gains in the energy and water sectors**

	• Diversification to cleaner Fuel Supply for Power Generation and scaling up development of domestic Renewable Energy Resources and Energy Efficiency is measured by: (1) Increase in share of natural gas supply for power generation: Baseline (2014): 7 percent of fossil fuel generation supplied by natural gas. Target (2017): 70 percent of fossil fuel generation supplied by natural gas; and (2) Increase in share of MW renewable power in the generation mix. Baseline (2014): Renewable power generation 0 percent of the generation mix. Target (2017): Renewable power generation 10 percent of the generation mix. • Reduction in electricity distribution network losses is measured by: Baseline (2014): The distribution sector has losses of 13.8 percent and lacks a multi-year loss reduction targets. Target (2017): Network Loss Reduction Program is under implementation and 2017 loss reduction target is achieved. • Scaling up implementation of energy efficiency and renewable energy in the water sector is measured by increase in energy efficiency savings as per the implementation of the Action Plan accompanying the Energy Efficiency and Renewable Energy Policy: Baseline (2013): Annual energy efficiency savings are 0 GWh. Target (2017): Annual energy efficiency savings are 50 GWh . • Optimizing allocation of water resources is measured by: (1) Water is more optimally allocated: Baseline (2013): 123 million cubic meter (MCM) of surface water used for municipal water use. Target (2017): 128 MCM of surface water used for municipal water use; and (2) Volume of treated wastewater used for non-domestic uses: Baseline (2013): 110 MCM. Target (2017): 135 MCM.
Overall Risk Rating	Substantial
Operation ID	P154299

IBRD PROGRAM DOCUMENT FOR A PROPOSED LOAN

TO THE HASHEMITE KINGDOM OF JORDAN

I. INTRODUCTION AND COUNTRY CONTEXT

1. **The proposed operation in the amount of US$ 250 million - the first in a programmatic series of two Development Policy Loans (DPLs) - aims to support fiscal and policy reform programs undertaken by the Government of Jordan (the Government) in the energy and water sectors.** The policy program supported by the DPL is necessary for improving the fiscal position of the Government and laying the groundwork for the implementation of medium term efficiency gains to promote the long term sustainability of these sectors. The programmatic DPL series will also address key sector issues and mitigate risks identified by the Jordan Systematic Country Diagnostic, which is under preparation, and will promote economic growth, fiscal balance and private sector development.

2. **Two successive external shocks - the global recession and the regional turmoil that followed the Arab Spring - have exacerbated Jordan's long-term structural vulnerabilities**. Following the global financial downturn of 2008, growth decelerated sharply. Turmoil throughout the region further undermined Jordan's outlook, which led to (i) slower growth and lower fiscal revenues, and (ii) initially, increased public spending to partly accommodate social pressures. This has resulted in an accumulation of a large public debt, the servicing of which, exacerbates fiscal pressures. In particular, interruptions in the Egyptian natural gas supply, which in 2009 fueled about 90 percent of Jordan's power generation, forced the country to increasingly rely on more expensive and less efficient diesel and heavy fuel oil (HFO) during a time of high oil prices. The Government's initial decision not to pass-through the higher fuel costs to final consumers resulted in a significant increase in the National Electricity Power Company's (NEPCO) operating losses. As a result, NEPCO has been running deficits equivalent to around 4-5 percent of gross domestic product (GDP) per year since 2011 and has accumulated total operating losses of about JD4.7 billion by end of 2014, for which debt servicing has until recently been directly covered by the budget. As a result, gross public debt has risen rapidly and is estimated to have reached around 90 percent of GDP at the end of 2014. Further budgetary losses equivalent to 1 percent of GDP were added in 2012 by the water sector because costs were not fully recovered in the sector, and the increased dependence on high cost technologies to make water available.

3. **The Government consequently has embarked on a major program aimed at strengthening its macroeconomic framework.** Policy measures within the framework of the International Monetary Fund (IMF) Standby Arrangement (SBA)[1] and the World Bank-financed Second Programmatic Development Policy Loan[2] have already achieved a significant reconfiguration of fiscal policies, improvements in the business climate, and a broadening of the revenue base. The unsustainably high cost of energy subsidies has led the Government to embark on a major subsidy reform program supported by the IMF SBA which, in November 2012, completely eliminated subsidies on petroleum products (except for Liquefied Petroleum Gas (LPG) cylinders mainly used for household cooking). The Government is also implementing a five year electricity tariff adjustment plan that aims at enabling NEPCO to reach full cost recovery by 2017. To promote energy security and reduce cost of electricity

[1] The IMF SBA was approved by the IMF Board on August 2, 2012 in the amount of SDR 1,364 million (about US$2 billion and closed in August 2015.

[2] The Jordan Second Programmatic Development Policy Loan (US$ 250 million) was approved on March 13, 2014 and is expected to close on September 30, 2015.

supply, the Government is also seeking to diversify its energy sources by scaling up renewable energy and developing a Liquefied Natural Gas (LNG) terminal in Aqaba, which became operational in July 2015. In addition, the Government is implementing a Structural Benchmark Plan which aims to achieve operation and maintenance cost recovery in the water sector by 2020 through a combination of revenue increases and cost reductions.

4. **While the IMF-supported program has addressed fiscal pressures caused by the energy and water sectors, it is critical for Jordan to implement broader policy and structural reforms to sustain economic growth, despite the temporary relief arising from the fall of oil prices.** The economy in Jordan is expected to grow at about 4 percent annually, which will increase electricity and water demand at average annual rates of 6 and 5 percent respectively. This high rate of growth puts further stress on public resources, especially if the underlying fundamental stress factors in these sectors are not addressed and systems are not optimized. To that end, key elements of the Government's efforts focus on the restoration of the financial viability of sector utilities, in particular NEPCO - the backbone of the electricity sector - and on improving the operational performance of the energy and water sectors through efficiency gains.

5. **The objective of the DPL is to improve the financial viability of and increase efficiency gains in the energy and water sectors in Jordan.** The policy program supported by the DPL will be structured around two pillars: (i) improving the financial viability of the electricity and water sectors; and (ii) increasing efficiency gains in the energy and water sectors. The first pillar will support the Government's plan to set the electricity and water sectors on a path of sustainable cost recovery and its efforts to restore NEPCO's creditworthiness by addressing its accumulated debt. The second pillar will support the Government's programs that strengthen efficiency gains in the supply and demand sides of the energy and water sectors through deeper diversification to more economic and environmentally clean fuel supply resources and power generation mix, scaling up of energy efficiency programs in both sectors, and a more efficient utilization of water resources.

6. **The DPL supports the Jordan 2025 Vision of self-reliance and financial stability and contributes to the World Bank's strategic goals of ending extreme poverty and promoting shared prosperity in a sustainable manner.** The policy areas supported by the DPL are aligned with the objectives, and support achievement of the medium term targets of the recently approved "Jordan 2025: A National Vision and Strategy". The Jordan 2025 Vision seeks to achieve self-reliance and stability based on financial and environmental sustainability, enhanced productivity, increased competitiveness and the gradual removal of indiscriminate subsidies. The implementation of the DPL-supported policy program and achievement of its results could yield significant increase in revenues and cost savings in the total amount of up to JD1.7 billion[3] in the electricity sector over the 2015-2017 period. That will reduce the fiscal burden of electricity subsidies on the Government's budget and will provide the Government with larger fiscal space to invest in pro-poor programs and in more inclusive economic activities to improve the standard of living of the population in Jordan. The DPL-supported program of fuel switching and renewable energy development will also produce over the period significant environmental benefits by reducing energy-related emissions in the amount as much of 23.5 mt CO2.[4]

[3] World Bank calculations
[4] World Bank calculations

7. **Poverty fell steadily in Jordan over the past decade but a large proportion of the population remains vulnerable**. Along with improvements in human development indicators and steady economic growth, poverty fell steadily in Jordan during the last decade; by 2010, an estimated 14.4 percent of the population lived below the poverty line compared to about 20 percent in 2006[5]. Challenges, however, remain. Household expenditures appear quite volatile, even on a short term basis; in 2010, quarterly poverty estimates varied from approximately 15 to 20 percent. This indicates that a large number of households face "transient poverty" in the sense that they experienced poverty in at least one quarter during the year, despite being officially considered as non-poor because their annual per capita consumption exceeded the annual poverty line. In fact, about a fifth of Jordanians consume no more than 1.1 times that of households which are below the current poverty line and about a quarter consume no more than 1.2 times that of those below the current poverty line. As a large number of people are concentrated around the poverty line, a small shock to their monthly consumption can pull them into or out of poverty.

8. **Poverty scenarios in Jordan are usually closely linked to energy, food and water subsidies, and therefore any reform could reduce the welfare of the poor if not mitigated properly**. To minimize the impact of the elimination of subsidies for most petroleum products in 2012, the Government simultaneously introduced a cash transfer scheme, known as the Fuel Compensation Cash Transfer Program for households. It also limited increases of electricity prices to households whose monthly consumption is above 600 kilowatt hour (kWh). The Fuel Compensation Cash Transfer Program provides cash transfers to households when oil prices are above US$100 per barrel. Therefore the Program suspended payments in late 2014 due to the decline of oil prices. Finally, the Government is also putting in place a National Unified Registry which, when fully implemented, will improve the efficiency of delivering cash transfers to mitigate any impact of future electricity and water tariff reforms, among other objectives.

II. MACROECONOMIC POLICY FRAMEWORK

A. Recent Economic Developments

a) The Context Since 2008

9. **Against a background of social discontent, Jordan initially weathered large external shocks despite its limited policy space, but eventually began to tackle its structural weaknesses**. Over the past few years, Jordan has suffered two successive external shocks of significant importance: the 2008 global financial crisis and the ensuing global recession, and regional turbulences that started in early 2011 with the onset of the Arab Spring events. The impact of these shocks was exacerbated in Jordan by the disruption in critical gas supplies from Egypt and spillover from the neighboring Syrian conflict. Due to these external shocks, the Jordanian economy experienced wider fiscal deficits and loss of reserves, in addition to persistent sluggish growth rates. The widening of the fiscal deficits was partially a result of the Government accommodating social demands, addressing acute shortages of natural gas, and dealing with a growing refugee crisis. As macroeconomic imbalances widened significantly, external assistance was sought to meet financing needs. In particular, the Government embarked on an IMF program in 2012, which entailed reforms and consolidation measures.

[5] World Bank estimate

10. **These large external shocks led to a significant deterioration in Jordan's public finances**. With the onset of the regional turmoil in 2011, the central Government's fiscal deficit (excluding grants) widened significantly [Table 1]. Domestic revenues shrank from an average of 27 percent of GDP during 2000-2008 to an average of 24 percent of GDP in 2014, partly due to a drop in economic activity and partly due to policy measures. On the expenditure side, the Government initially accommodated a number of social demands in 2011, through larger transfers and wage increases. Capital expenditures were cut in 2012 in an effort to control the fiscal deficit. However, earmarked grants from the Gulf Cooperation Council (GCC) marked the beginning of an increase in capital spending in 2013, and helped sustain short-term activity while boosting Jordan's medium-term growth prospects.

Table 1. Jordan: Key Macroeconomic Indicators, 2012-2017[(1)]

	2012 Act.	2013 Act.	2014 Act.	2015 Proj.	2016 Proj.	2017 Proj.
Real sector	(annual percentage change, unless otherwise specified)					
Real GDP	2.7	2.8	3.1	3.5	3.9	4.0
Real GDP per Capita	0.4	0.6	0.8	2.3	1.6	1.7
Money and prices	(annual percentage change, unless otherwise specified)					
CPI Inflation (p.a)	4.5	4.8	2.9	1.0	2.0	2.2
Money (M2)	3.4	9.7	6.9	7.8	8.4	7.0
Investment & saving	(percent of GDP, unless otherwise specified)					
Total Investment	26.9	28.1	28.0	27.5	28.3	28.4
Gross National Savings	11.7	17.8	21.2	21.9	23.1	24.7
Government finance	(percent of GDP, unless otherwise specified)					
Total revenues and grants	23.0	24.1	28.6	25.9	26.7	26.8
Domestic Revenue (excluding grants)	21.5	21.5	23.7	23.2	23.2	23.3
o/w. tax revenue	15.3	15.3	15.9	16.1	16.5	16.6
Foreign Grants	1.5	2.7	4.9	2.6	3.5	3.5
Total expenditure and net lending	32.0	35.6	37.7	28.9	29.5	29.7
Current*	28.9	31.3	33.2	24.7	24.9	24.9
o/w wages and salaries	5.0	5.0	4.9	4.8	4.7	4.6
o/w interest payment	2.7	3.1	3.6	3.6	3.7	3.6
o/w Transfer to utilities (NEPCO and WAJ)	0.3	5.9	7.0	0.0	0.0	0.0
Capital & NL	3.1	4.3	4.5	4.2	4.6	4.8
Overall balance (deficit (-), excl. grants)**	-10.5	-14.1	-14.0	-5.4	-5.1	-4.7
Overall balance (deficit (-), incl. grants)	-9.0	-11.4	-9.1	-2.8	-1.6	-1.2
Primary Balance (deficit (-), excl. grants)	-7.8	-11.0	-10.3	-1.8	-1.4	-1.1
Primary Balance (deficit (-), incl. grants)	-6.4	-8.3	-5.5	0.8	2.1	2.4
External sector	(percent of GDP, unless otherwise specified)					
Current Account	-15.2	-10.3	-6.8	-5.7	-5.2	-3.6
Net Exports	-28.0	-29.4	-25.9	-19.8	-19.0	-18.0
Total Exports	46.2	42.5	43.3	44.2	45.4	45.6
Total Imports	74.3	71.9	69.2	64.0	64.5	63.6
Net Income and transfers	12.8	19.2	19.1	14.1	13.8	14.4
Net Private Investments (FDI and Portfolio)	6.3	10.5	7.8	9.0	9.9	10.2
Gross Reserves (in million US)	6,633	12,006	14,079	16,203	17,158	19,267
Gross Reserves (Months of Imports GNFS)	3.5	6.2	7.3	7.8	7.7	8.2
Total Debt	(in million US$, unless otherwise specified)					
Total Debt Stock	24,864	29,192	31,983	34,782	35,741	37,037
Debt to GDP Ratio (%)***	80.2	86.7	89.0	88.8	85.7	83.5
Memorandum Items:						
Nominal GDP (Billion JD)	22.0	23.9	25.4	27.7	29.5	31.4
GDP (in million US$)	31,015	33,679	35,917	39,159	41,716	44,371

Source: Government Data and World Bank Staff Calculations.
* Includes adjustment to other receivables for 2012 (0.4% of GDP) and transfers to NEPCO and WAJ. As of 2015, NEPCO and WAJ will revert to government-guaranteed borrowing from commercial banks.
** Includes additional measures needed for 2015 (0.2 % of GDP), 2016 (1.2 % of GDP) and 2017 (1.7 % of GDP)
*** Government and guaranteed gross debt. Includes NEPCO estimated borrowings for 2015-2017.
(1) As of July 1, 2015.

11. **Jordan's public finances were particularly weighed down by losses at NEPCO and WAJ**. Interruption of Egyptian gas supply resulted in NEPCO running deficits equivalent to 4-5 percent of GDP per year since 2011, and accumulating total operating losses of about JD4.7 billion, for which debt servicing has been directly covered by the budget. Additionally, low levels of cost recovery in the WAJ induced large losses, further straining the public purse; in 2013, the Government spent JD496 million on water, while recovering only JD214 million in revenues from water, wastewater and irrigation water tariffs. In 2014, the IMF estimated the deficit in the sector at JD313 million, constituting about 1.2 percent of GDP and 14.2 percent of the total deficit (including grants).

12. **In 2012, the Government began to strengthen its macroeconomic framework, supported in part by a three-year IMF SBA strucutural adjustment program.** The program included bold and progressive elimination of retail petroleum product subsidies as well as electricity/energy reforms.[6] Unsustainably large fiscal costs of subsidies on petroleum products, and their regressive nature, led the Government to implement substantial reforms in November 2012—the complete elimination of subsidies on gasoline, diesel and kerosene.[7] To prevent the re-occurrence of subsidies over time, the Government also reinstated the monthly automatic price adjustment mechanism for petroleum products that had previously been in place until December 2010. Aside from generating fiscal space, the removal of subsidies from petroleum combined with a means-tested cash transfer program significantly improved the progressivity of public spending. Furthermore, a medium-term electricity/energy strategy with electricity tariff increases and energy sources diversification as key elements was announced in October 2013. The first electricity tariff increases occurred in August 2013 with subsequent increases every January until cost recovery at NEPCO is attained (planned for 2017). Moreover, a new LNG terminal in the Aqaba Port on the Red Sea and the completion of renewable energy projects will enable Jordan to reduce the cost of supply in 2015 and onwards by reducing dependency on expensive diesel.

b) Economic

13. **Despite the challenging external environment, growth in Jordan remained moderate, albeit sluggish**. Following the IMF program, the GDP growth improved from 2.7 percent growth in 2012 to 3.1 percent in 2014. In that year, real GDP growth was primarily led by net exports and public investment (Figure 1). Compared to 2013, 2014 saw an 8.5 percent improvement in public investment and a 10.7 percent reduction in the trade deficit (in real terms) (Figure 2). The public investment drive was mostly due to higher capital expenditures predominantly financed by earmarked GCC grants. A 6.2 percent narrower trade deficit in 2014 year-over-year (yoy) was driven by an 8.7 percent increase in total exports. This, in turn, reflected the post-strike recovery in the potash and phosphate industries which saw domestic exports of mineral or chemical fertilizers and crude phosphates grow by 28.8 percent and 24.7

[6] The electricity/energy reform program under the IMF SBA was developed and monitored by the IMF in close collaboration with the World Bank.
[7] While subsidies on LPG gas cylinders used mainly for cooking were not fully removed, their prices rose by 54 percent.

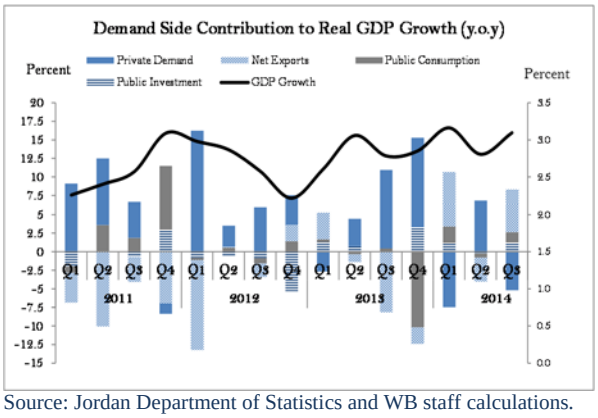
percent yoy, respectively. Private demand's contribution (private consumption and private investment) to growth is expected to have declined over 2014 partly reflecting weaker real estate demand (captured in a 7.4 percent decrease in construction permits in 2014). First quarter performance was below expectations at 2.0 percent real growth yoy, largely driven by contraction in construction and tourism sectors in part driven by ISIS-related security events.

14. **Unemployment rates declined largely due to a drop in labor participation, masking underlying structural weaknesses.** While the unemployment rate dropped from 12.6 to 11.9 percent from 2013 to 2014, this improvement was not driven by increased employment but by an equivalent and concerning drop in the labor force participation rate from 37.1 percent in 2013 to 36.4 percent in 2014, the lowest average since 2007. This was possibly driven by discouraged workers given perceived competition from refugees. It could also have been driven by job-seekers aiming for a public sector job who dropped out of the labor force given the fiscal consolidation program which has limited the public sector's traditional role as major employer in the economy. Women and youth are particularly affected by unemployment with 20.7 percent of women unemployed in 2014.

Figure 1. Real GDP Growth Displays a Timid Recovery.

Source: Jordan Department of Statistics and WB staff calculations.

Figure 2. Net Exports and Public Investment Drove Growth in 2014.



Source: Jordan Department of Statistics and WB staff calculations.

15. **Temporary supply shocks that had pushed up headline and core inflation are fading** (Table 1). Based on the newly rebased (to 2010) consumer price index (CPI), the headline inflation rate dropped to 2.8 percent in 2014, compared to 5.6 percent in 2013, mostly reflecting the plunge in international oil prices. As expected, core inflation, which excludes food and energy products, also started to decelerate; the 12-month core inflation rate declined to 5.1 percent yoy in December 2014 against 5.4 percent on a period average basis. This reflects the fading impact of one-off supply shocks—the increase in customs duties on clothes in September 2013 and taxes on cigarettes in February 2014—and lower demand for housing possibly due to a slower influx of Syrian refugees beginning May 2013. Given further subsiding of these measures, low international oil prices and the depreciating Euro, the 12-month headline inflation rate turned negative in February 2015 at -1.7 percent (yoy) registering -1.1 percent (yoy) in April 2015. The core inflation continued to abate to 3.7 percent on a yoy basis in April 2015.

16. **Exports of services helped narrow the current account deficit in the face of persistent disruptions to Egyptian gas supplies and the Syrian conflict.** As a result of limited supply of Egyptian gas, Jordan resorted to increased energy imports to meet shortages. While a 44 percent reduction in the international oil price from June to December 2014 partially mitigated this higher cost, energy imports (mineral fuels and lubricant) were nonetheless 6.4

percent (yoy) higher overall in 2014, driving a 3.1 percent (yoy) increase in total imports.[8] This more than offset a 7.5 percent (yoy) rise in exports, led by a 28.8 percent (yoy) increase in mineral or chemical fertilizers, following a sharp decline in 2013 due to strikes and administrative disruptions in potash and phosphate industries. Exports of services, however, experienced a 12.0 percent rise leading to a 43.7 percent larger services account due to larger net travel flows of JD151 million during 2014 compared to 2013. As a result, the current account deficit narrowed from 10.3 to 6.8 percent of GDP between 2013 and 2014, respectively.

17. **Strengthening balance of payments resulted in higher foreign reserves at the Central Bank of Jordan (CBJ)** – (Table 2). At end-2014, gross international reserves at CBJ reached US$14.1 billion (7.3 months of imported goods and services), well above end-2013's US$12 billion (6.2 months of imported goods and services). This rise is largely attributable to (a) an improving current account balance; (b) a US$1 billion US-backed Eurobond issue; (c) the disbursement of US$387 million from the IMF as part of the Stand-by-Arrangement; and (d) US$ 1.7 billion in GCC grants.

Table 2. Jordan: Balance of Payments Financing Requirements and Sources, 2012-2017

	2012 Act.	2013 Act.	2014 Act.	2015 Proj.	2016 Proj.	2017 Proj.
	(in million US$, unless otherwise specified)					
BOP financing requirements and Source	0	0	0	0	0	0
Financing requirements	-5370	-4179	-3593	-3656	-2703	-2149
Current account deficit	-4724	-3471	-2443	-2229	-2159	-1616
Long term debt amortization (excl. IMF)	-647	-708	-1150	-1427	-544	-533
Financing Sources	5370	4179	3593	3656	2703	2149
FDI and portfolio investments (net)	1955	3527	2851	3533	4144	4543
Capital grants	3	2	4	0	0	0
Long term debt disbursements (excl. IMF)	1010	352	1665	2185	114	53
Reserves Changes of Monetary Auth. (- = increase)	2504	-6265	-2073	-2124	-955	-2109
IMF credit (net)	771	1032	388	663	0	-258
Other Capital Flows	-872	5530	226	-600	-600	-300
Short term capital inflows	0	0	532	0	0	220

Source: Government data and World Bank staff calculation and projections

18. **The drop in inflation and the increase in foreign reserves allowed the central bank to maintain an expansionary monetary policy aimed at promoting growth.** While the output gap has been closing since Q2-2014, the cumulative output gap is estimated to be negative since early 2013, indicating spare capacity in the economy. To stimulate the economy, the CBJ lowered its key policy rates—overnight deposit window rate by 125 base points (bps) and the rediscount and repo rates by 75 bps—starting in August 2013. Moreover, abundant external financing reduced the need for domestic borrowing, leading to an easing in liquidity

[8] Energy imports have grown substantially over the past few years, reaching JD4.4 billion equivalent to 27.2 percent of the imports of goods in 2014 compared to 2009's level of 18 percent.

conditions.[9] Nonetheless, commercial bank lending to the private sector was timid, rising by a modest 4.6 percent in 2014 compared to 2013,[10] in part reflecting the uncertain regional security environment.

19. **Amid repeated economic shocks, Jordanian banks are generally stable, profitable, liquid and adequately capitalized**. By end-2014, banks' nonperforming loans (NPL) ratio registered 5.6 percent, compared to 7.0 percent at end-2013. While the NPL ratio has improved since the 2011 peak of 8.5 percent, it still is above the pre-crisis level of 4.1 percent in 2007. Also by end-2014, the capital adequacy ratio was robust at 18.4 percent, as was the leverage ratio, which stood at 12.5 percent (well above the 3 percent stipulated by Basel III). The net foreign asset position of commercial banks registered minus US$2.0 billion at end-2014, down from minus US$1.6 billion a year earlier, reflecting a higher stock of foreign reserves at CBJ and continued de-dollarization which, at 17.5 percent end-2014 (compared to 19.5 percent at end-2013), is back to pre-tension levels. Banks' exposure to sovereign debt[11] has risen, however, accounting for 40.7 percent of total assets in end-2014, up from 38.8 percent in end-2013.

20. **As an oil importing country, Jordan has seen a positive impact of falling oil prices.**[12] Reduced cost of imported energy helped narrow NEPCO's deficit, which in turn has a positive impact on public debt accumulation. Simultaneously, lower energy imports are relieving the current account deficit. Furthermore, declining oil prices support growth via two channels: (i) larger purchasing power that reinforces consumption and (ii) less costly energy inputs in the production of goods and services.

B. Macroeconomic Outlook and Debt Sustainability

21. **Jordan's rising liabilities have structural elements, cyclical elements and temporary elements**. Structural elements are reflected in a persistent central Government fiscal deficit and dependence on grants, since even before the regional turmoil. This has been partly targeted by the fuel subsidy reforms as well as energy and water reforms that are included in this DPL. The cyclical factor is illustrated by falling tax revenues from an average of 27.2 percent of GDP during the pre-crisis period of 2004-2010, to 21.5 percent since 2011, in part due to declining average growth rates from 6.9 percent to around 3 percent, respectively. An increase in capital investments-- which were cut in recent years in an attempt to control the overall fiscal deficit-- would help in an environment of sluggish economic activity. Monetary easing, while reasonable, has not recently had a strong transmission mechanism. Temporary elements primarily include the disruption of Egyptian gas supplies and switching to more expensive and cheaper diesel fuel. This effect is expected to taper off as alternative and more diverse energy sources come into effect.

[9] The cost of borrowing decreased with intrabank, Treasury bill and Treasury bond rates declining by 84, 83, and 100 bps respectively, between end-2013 and end-2014

[10] This masks banks' refusal to continue financing NEPCO's deficits in 2013, forcing the Government to take over direct financing from the budget. As a result, the year-on-year change in aggregate private sector credit data also reflects NEPCO's exit from the private credit market, making private sector borrowing appear more sluggish than it actually is. In 2015, however, banks have reverted back to financing NEPCO.

[11] Banks' sovereign debt exposure is computed as the ratio of commercial banks' aggregate investment in claims on public sector and deposits at the CBJ relative to total assets.

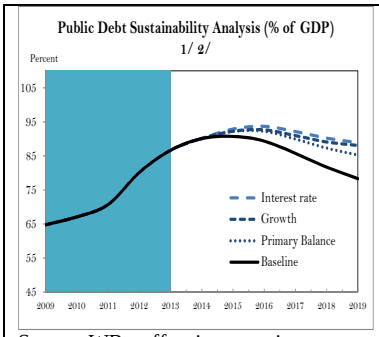
[12] While a decline in oil prices is most likely to have net positive effects on financing needs, these needs remain substantial. According to the latest IMF projections, which include falling oil prices, public gross financing needs in 2014 for Jordan were elevated at 25.9 percent of GDP.

22. **Expansion of medium term economic reforms in the electricity and water sectors are expected to address public finance weaknesses, helping to structurally improve Jordan's macroeconomic framework.** As public finance weaknesses are, to a large extent, driving the external deficit, reforms aimed at structurally improving public finances will strengthen the overall macroeconomic framework. Recently, reforms supported by the SBA included a new income tax law, which is expected to raise around 0.4 percent of GDP in 2015 through a combination of higher rates and broader bases for corporate and personal income taxes. Additionally, administrative measures to strengthen revenue collection are also ongoing. On the expenditure side, declining oil prices led to the discontinuation of a cash transfer scheme in the last quarter of 2014, which was introduced to mitigate the liberalization of fuel prices during periods when oil prices are above US$100 per barrel. Going forward, the proposed DPL supports reform measures that aim at improving the financial viability and increasing efficiency gains in the electricity and water sectors which will in part contribute to an expected decline in the public debt to 83.5 percent of GDP by 2017 compared to 89.4 percent by end of 2014.

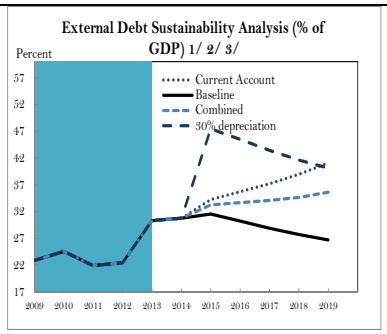
23. **Due to continued pressures from external shocks, including increasing regional geopolitical risk, growth is projected to remain moderate over the medium term.** Assuming no significant changes to the Syrian situation, primary growth drivers are expected to be public investment and private consumption. These, however, are subject to confidence shocks, mostly related to geopolitical risk, and could become more volatile, as the unexpected underperformance in Q1 2015 growth showed. Public investment would result from higher government capital expenditures, largely financed by the five-year US$5 billion GCC grant, allocations of which began in 2013. Private consumption partly reflects, in part, the positive impact of lower oil prices on purchasing power and also consumption linked to the Syrian refugees. As a result, real GDP growth is projected to reach 3.5 percent in 2015, further expanding to 3.9 percent in 2016. Risks to these forecasts, however, are tilted to the downside. Growth is projected to remain below pre-crises rates until the regional turmoil, especially the Syrian crisis, subsides. In the medium to long term, and depending on the extent of the oil price slump, second degree effects could materialize through lower remittances and investments sourced from the GCC region, negatively impacting both the balance of payments and growth. Should the price of oil significantly rebound, this would result in a negative supply shock and pressure the twin deficits (though the impact on both will become more muted over time given the well advanced gas supply diversification that Jordan has embarked on and the ongoing implementation of an electricity tariff adjustment plan).

24. **Jordan's public and external debt positions are sustainable although, given limited space, could be derailed by unexpected shocks** (Figures 3 and 4). While Jordan's public debt is projected to continue its positive trend through 2015, full implementation of the electricity sector reform program supported by the DPL would lead to a marked reduction in NEPCO's deficit in 2016, with sustainable full cost recovery expected by 2017. This would help lower the fiscal deficit which, combined with stronger GDP growth, would put public debt on a downward path. That downward path, however, would not materialize should interest rates or growth deviate notably from the baseline forecast. Similarly, while external debt is on a sustainable downward trend in the baseline forecast, a current account shock or a combination of shocks would result in unsustainable dynamics.

Figure 3. Jordan: Public debt sustainability analysis	Figure 4. Jordan: External debt sustainability analysis	Table 3. Jordan: External debt composition for 2013



Source: WB staff estimates using Marked Access DSA template. 1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. 2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.



Source: WB staff estimates using Marked Access DSA template. 1/ Shaded areas represent actual data. Shocks are permanent one-half standard deviation shocks. 2/ Permanent 1/4 standard deviation shocks applied to current account balance. 3/ One-time real depreciation of 30 percent

		Share of Total	
	USD (bln)	Debt (%)	% of GDP
External Debt	10.2	35.0	30.3
Government	9.1	31.3	27.2
Guaranteed	1.1	3.7	3.2
External Debt	10.2	35.0	30.3
short term	1.0	3.5	3.0
medium term	4.9	16.9	14.6
long term	4.3	14.6	12.7

Source: Government data and World Bank staff calculations

25. **While reserve buffers have been replenished, external financing remains vital to meeting fiscal and balance of payments needs that are declining but still remain large.** Thanks to improved confidence, de-dollarization has continued to take place since January 2013. Combined with the issuance of a US$1 billion Eurobond guaranteed by the U.S. Government on June 24, 2014 reserves rose strongly. In 2015, Jordan is expected to issue US$1.5 billion in US-guaranteed Eurobonds and a further US$500 million bond issue without guarantees. Thanks to lower oil prices, LNG supply for power generation and improved exports, the current account deficit is projected to narrow down from 6.8 percent of GDP in 2014, to 5.2 percent in 2016. As a result, foreign reserves are projected to reach 7.7 months of imports by 2016. The proposed operation would help contribute to this strengthening of reserve buffers. Nonetheless, large official transfers continue to be needed to meet the large external financing needs.[13]

26. **Risks to macroeconomic stability are broadly balanced as regional risks and external financing are likely to counterbalance each other.** The volatility and unpredictability of the Syrian crisis and the inter-linkages with the challenge of the Islamic State in Iraq poses large downside as well as upside risks. A worsening of the crisis could further intensify the already large influx of Syrian refugees across the borders and further disrupt Jordan's trade routes. On the other hand, a resolution of the Syrian crisis could generate a boom for Jordan as the country can be used as a platform for reconstruction in Syria, which would strengthen the investment climate. Counterbalancing the large downside risk would require continued implementation of structural reforms supported under this proposed DPL to improve the financial viability of the energy and water sectors, combined with enhanced external financing during times of duress, as has often been the case in Jordan's history.

27. **Under continued implementation of the Government's economic reform programs, Jordan's macroeconomic policy framework is deemed adequate.** Jordan is assessed to have reasonably well implemented the ongoing programmatic DPL, which is closing in September 2015 (the latest Implementation Status and Results Report[14] has Moderately Satisfactory ratings). The DPL's objective was to improve Jordan's transparency

[13] According to the IMF Article IV, May 2015, the gross external financing need is expected to amount to 16.6 percent of GDP in 2015.

[14] Archived on June 29, 2015

and accountability, enhance debt management and the efficiency of government spending, and promote private sector-driven growth.[15] Furthermore, the August 2012 - August 2015 IMF SBA program has provided external financing and motivated structural reforms, which combined with the implementation of the reform programs in the water and energy sectors supported by the proposed DPL, will help Jordan achieve fiscal sustainability over the medium term.

C. Relations with the International Monetary Fund (IMF)

28. **The three-year IMF SBA was satisfactorily completed in August 2015 with full disbursement of its tranches.** Following a rapid deterioration of its balance of payments and fiscal positions in the first half of 2012, Jordan entered into an IMF SBA in August 2012, with exceptional access of 800 percent of its quota (about US$2 billion). Program performance has been broadly satisfactory. The IMF Executive Board approved the sixth review in April 2014, making available over two thirds of the total amount so far. Notwithstanding the adverse impact of regional developments on Jordan, in particular the Syrian and Iraqi conflicts, and from continued disruptions in gas flows from Egypt, the CBJ was able to rebuild its reserves to a comfortable level. Fiscal consolidation has remained on track, with the exception of NEPCO incurring additional losses due to renewed interruptions in gas flows. The implementation of structural reforms has been mixed, with some delays in actions related to the energy and water sectors, a revised income tax law (which was finally passed in December 2014) and public financial management. On the other hand, the November 2012 elimination of petroleum subsidies, except for LPG, and increases in water and electricity tariffs were important and politically sensitive steps towards fiscal consolidation. The IMF's SBA had been flexible in taking into account fiscal pressures from the Syrian refugees as well as shortfalls in gas from Egypt. On April 24, 2015, the Executive Board of the IMF completed the sixth review of the SBA. Noting strong performance under the program, a staff-level agreement was also reached on the seventh and final review in June 2015 which the IMF Executive Board approved on July 31, 2015 enabling the final disbursement under the SBA program of SDR 284.1 million (about US$396.3 million). The IMF has noted the Government's commitment to gradual fiscal consolidation and has called for steadfast implementation of the energy strategy and accelerated structural reforms geared toward job creation focusing on labor market reform as well as improvements in the business climate and the quality of public institutions. Looking ahead, sustainability of the IMF SBA program in the energy and water sectors will be maintained under the reforms supported by the DPL. Close IMF engagement with Jordan will continue, including through Post-Program Monitoring and the Government's possible consideration of a successor IMF program.

III. THE GOVERNMENT'S PROGRAM

29. **The policy areas of the proposed DPL are designed to support the Government's broader energy and water sector programs,** which focus on improving the operational and financial performance through coordinated programs of price adjustments and scaling up efficiency gains, including more diversification of supply resources and improvements in demand management.

A. Government's Energy Sector Development Program

[15] Reforms have continued apace on the second DPL. These include the award of a preliminary credit bureau license and the provision for a Sukuk issuance in the 2015 budget law to finance the deficit.

30. **Jordan's successful record of electricity sector reforms could not withstand extreme external shocks of fuel supply interruptions and price volatility.** Since the early 2000s, Jordan has made significant progress in reforming its electricity sector. The sector was unbundled into two generation, one transmission, and three distribution companies while an energy regulator was established in 2001. The largest generation company and all three distribution companies were privatized. The Government has also successfully developed its power generation needs by privately financed Independent Power Producers (IPPs) and twice implemented major energy subsidy reform programs (2008 and 2012). However, Jordan's domestic oil and natural gas resources are limited. As a result the country is heavily dependent (97 percent of its needs) on imported fossil fuel and predominantly relied on Egyptian natural gas supply to fuel its power generation.[16] The electricity consumption has at the same time been steadily growing at an average annual rate of 4.6 percent during 2009-2013 resulting in total energy imports of JD3.7 billion equivalent to 27 percent of imports of goods in 2013 and 15 percent of GDP[17], thereby increasing Jordan's vulnerability to external fuel supply shocks. Since 2011 the repeated and extensive interruptions in the Egypt gas supply, surging cost of fuel substitutes and inability of the electricity pricing regime to carry through timely and effective adjustments of electricity prices have hiked the operational losses of NEPCO putting increased pressure on the Government's budget and deteriorating the financial performance of NEPCO.

31. **In response, the Government is implementing a reform program to address the challenges and vulnerability risks of energy sector sustainability**. The Government recognizes that fundamental structural reforms are necessary to improve the financial and operational performance of the energy sector, addressing its main challenges of mitigating the rising cost of energy supply, especially fuels for power generation and maintaining security of supply. Key elements of the Government program in the electricity sector include:

- **Electricity Tariff Adjustments and Management of NEPCO's Debt**: Under the IMF supported program, the Government developed a five year (2013-2017) electricity tariff adjustment plan that aims, in combination with measures described subsequently, to diversify the fuel and power generation mix and reduce cost of electricity supply in order to bring NEPCO's wholesale electricity tariff to full cost recovery in 2017. The Government implemented two planned annual tariff increases of 15 percent in 2013 and 2014 and a 7.5 percent tariff increase in January 2015. The increase in January 2015 had initially been planned to be at 15 percent, but the Government agreed with the Parliament to reduce it by half due to falling oil prices. The Government continues to be committed to achieving full cost recovery in 2017 and is considering options to improve the electricity tariff structure as well as other measures to restore the financial viability of NEPCO which has JD4.7 billion of accumulated debt since 2011.

- **Diversification of Fuel Supply Resources**: Jordan initiated a program for the diversification of fuel supply resources to improve security of supply and mitigate the impact of the interruption of the Egyptian gas supply. Under the IMF SBA program, the development of a Floating Storage and Regasification Unit (FSRU) at Aqaba for LNG import was initiated and it became operational in July 2015. The FSRU is managed by NEPCO, which has signed import contracts of up to 250 mmcf/day in its capacity as the

[16] The peak of Egyptian gas supply to Jordan was 92 percent of its needs in 2009, compared to 27 percent in 2011 and 7 percent in 2014. The average between 2004-2010 of power generation fueled by Egypt gas is 73 percent

[17] IMF SBA Article IV Reviews, 2008-2014

single buyer responsible for purchasing fuel for power generation. The Government and NEPCO realize that the signed LNG supply contracts are a first step in a longer term strategy to restore the share of natural gas supply for power generation, which includes the option of increasing the quantity imported through the FSRU, or securing other sources of gas imports from the Mediterranean.

- **Diversification of Power Generation Mix through Domestic Resources**: Jordan is also taking steps to further improve the security of electricity supply by diversifying its power generation mix from domestic energy resources. The Government has made progress in developing new renewable energy projects and is on track to reach its target of 10 percent of renewable energy in the overall energy mix by 2020. As of February 2015, about 400 MW of contracts for privately developed wind and solar power projects have been awarded and are planned for operation by 2017. Another 590 MW of renewable energy projects are also planned to be contracted by end-2015/2016. To enable the integration of new renewable energy into the transmission grid, NEPCO is strengthening its institutional capacity for renewable energy operation and dispatch and is considering financing additional transmission investments to integrate a larger share of renewable energy. In November 2014, the Parliament amended the 2012 Renewable Energy and Energy Efficiency (REEE) Law to require improved bylaws and regulations for the development of renewable resources by direct proposals.

- **Promoting Energy Efficiency**: After a long delay, the Ministry of Energy and Mineral Resources (MoEMR) established the Jordan Renewable Energy and Energy Efficiency Fund (JREEF). The establishment of the JREEF is mandated by the 2012 REEE Law to raise awareness of energy savings potential among industrial, commercial and household consumers, to provide technical and financial support to overcome existing investment barriers, and to promote private investments in energy efficiency and renewable energy projects. The JREEF is developing its bylaws and business plan and is in the process of setting up the Fund's financial windows to provide financial support to targeted energy efficiency projects currently under its consideration.

B. Government's Water Sector Development Program

32. **Jordan is one of the most water-stressed countries in the world**. Its 2014 per capita annual renewable resources of 129 cubic meters is far below the threshold of severe water scarcity of 500 cubic meters per capita per year.[18] Rapid population growth, income growth, and urbanization in combination with a fixed supply of total renewable water resources will further accelerate the decline in available per capita renewable water resources, and increase the gap between supply and demand, adding pressure to the sustainable use of these scarce water resources. In addition, limited wastewater treatment capacity, inadequate cost recovery, the high operation and maintenance costs (among others, the results of the high energy intensity of the water sector) and the dependency on trans-boundary waters further complicate water sector management. As a result, groundwater levels have declined rapidly, while traditional surface water and groundwater resources cannot meet water demand. The Government estimated the projected deficit between supply and demand in 2013 at 312 MCM. The severe water scarcity forces Jordan to increasingly maximize its use of shared water resources. Yet,

[18] The country also depends partly on water sources it shares with other countries. The Vision 2025 aims to maximize the use of its shared water resources.

the country will also increasingly become more dependent on non-conventional sources of water that often have to be pumped over large distances resulting in high marginal cost of new water sources (such as the Disi Conveyor project).

33. **Jordan's record of water sector reforms is under pressure because of extreme external shocks that have resulted in rapidly increasing costs of service delivery.** Since the 1990s Jordan has made significant progress in reforming its water sector. It has instituted a large set of policies aimed to deal with extreme water scarcity. It established regional water and wastewater utilities, of which Miyahuna and Aqaba are currently able to generate sufficient funds to cover their operation and maintenance costs.[19] The large influx of Syrian refugees and the increase in electricity prices have further accelerated the cost of providing water and has increased the sector's dependence on the Government's budget. The influx of Syrian refugees forced the Ministry of Water and Irrigation (MoWI) to improve existing water supply systems to provide adequate water to refugees and construct proper wastewater collection systems to avoid pollution of the aquifers. MoWI estimated that the direct annual water-related cost of hosting Syrian refugees was JD128 million. At the same time, the dismantling of electricity subsidies and the increase in diesel prices has had a major impact on the water sector because the latter is highly energy intensive due to geographical and hydrological conditions, and this results in high pumping costs. In 2013, the Government was able to cover 86 percent of its current water expenditure but only 59 percent of its total (current and capital) expenditure.

34. **In response, the Government is implementing a reform program addressing the challenges and vulnerability risks linked to financial sustainability of the water sector**. The Government recognizes that more fundamental structural reforms are necessary to improve the financial and operational performance of the water sector by addressing the rising cost of water supply and its inputs, while remaining focused on the further optimization of the allocation of water resources as the major tool to deal with extreme water scarcity. Key elements of the Government program in the water sector include:

- **Improvement of the financial sustainability of the water sector**. Under the IMF SBA, the Government developed a medium-term Structural Benchmark Program (2013 – 2021) that aims to increase sector revenues, while reducing the costs of service delivery in order to improve operation and maintenance cost recovery in the water sector. Since 2013, the Government has implemented three tariff increases affecting different types of water users. It has also implemented policies to improve billing and collection efficiencies in water utilities. Another series of tariff and fee increases covering various groups of water consumers are forecasted to take place between 2015 and 2020. While the Government aims to increase revenues, it is also working on reducing the inefficiencies in the sector. One of the most important inefficiencies is related to energy use. Due to its specific hydrological and topographical characteristics, the water sector has become increasingly energy intensive. As electricity costs are increasing, the Government has realized that energy efficiency is an important tool to improve the sector's operational and financial performance.

- **Optimization of the allocation of water resources.** Optimization of water allocations is a longstanding focus of the Government. As the per capita available renewable water resources are dropping steadily due to population growth, the country still depends disproportionally on groundwater resources causing over-exploitation of these

[19] The recently established Yarmouk utility (covering the northern governorates) was in a weak financial position when it was established, and the influx of Syrian refugees has strained its progress in achieving financial sustainability.

resources. The Government is developing policies to optimize its use of water resources by achieving a more efficient use of existing surface water resources, reducing the over-extraction of groundwater supplies, while increasing the reliance on treated wastewater to supply farmers and industry. This requires the Government to further expand wastewater treatment capacity. In 2013, annual treated wastewater flows amounted to 121 MCM. The Government program promoting the efficient use of surface water resources aims to increase the cost of groundwater through a combination of measures that focus on reducing energy subsidies and increasing groundwater abstraction charges.

- **Enhancement of the provision of water services to domestic and agricultural consumers.** Although water and sewer coverage is high in Jordan (compared to many other countries in the region), the Government aims to further improve access to wastewater collection and treatment and storm-water collection. This improved access will in turn improve the population's quality of life, and will also directly assist in optimizing the allocation of water resources as wastewater treatment and storm water collection will especially help to optimize the use of water resources.

IV. THE PROPOSED OPERATION

A. Link to Government Program and Operation Description

35. **The operation in the amount of US$ 250 million is the first in a programmatic series of two single-tranche DPLs**. The rationale for the programmatic option is linked to the nature of the Government reform policies supported by the programmatic DPL series which are expected to achieve the envisaged results and ensure sustainability in the medium term. In addition, the programmatic approach responds to the Government's interest in a follow-up operation within 18 to 24 months after the World Bank Board's approval of the first DPL. Depending on future financing needs, the Government, in agreement with the Bank, may opt for a Policy Based Guarantee (PBG) as the second policy operation to facilitate the Government's access to funding in commercial markets.

36. **The program development objective of the DPL is to improve the financial viability and increase efficiency gains in the energy and water sectors in Jordan**. Lessons learned from energy and water sector reforms in Jordan show that improving the operational efficiency in parallel to increasing sector revenues is essential to achieving sector sustainability, as users are reluctant to pay higher prices if services deteriorate. The DPL-supported policy program will therefore be structured under two main pillars: ***Pillar A: improving the financial viability of the electricity and water sectors; and Pillar B: increasing efficiency gains in the energy and water sectors***. The first pillar will support the Government's plans to set the electricity and water sectors on a path of sustainable cost recovery, including efforts to restore the creditworthiness and financial standing of NEPCO. The second pillar will support Government's programs that aim to increase efficiency gains both in the supply and demand for energy and water.

37. **The development objective of the proposed DPL contributes to the national objective articulated in the Jordan 2025 Vision for achieving self-reliance and financial stability based on financial sustainability and enhancing productivity across various economic sectors**. The policy measures supported under Pillars A and B build on and further broaden the IMF SBA supported structural programs to ensure that they stay on track after the

conclusion of the SBA, expected in August 2015, and to promote their sustainability. The measures supported by the DPL, in particular, promoting security in energy supplies, diversifying energy sources, and optimizing the use of water resources will over the medium-term help Jordan achieve the financial stability objective of the Jordan 2025 Vision and improve Jordan's resilience and exposure to potential external shocks.

38. **The policy matrix supported by the programmatic DPL series is included in Annex 1**. It includes prior actions taken by the Government before the presentation of the first DPL for approval by the Bank's Board and indicative triggers which are subsequent actions to be taken by the Government to move forward with the second DPL. Box 1 describes the eight prior actions identified for the first DPL. The policy matrix is designed with carefully selected prior actions that are critical for implementation of subsequent triggers and achieving the results of the reform program supported by the DPL. The policy measures included in the policy matrix are also aligned with the Government's own short- and medium-term reform programs in the energy and water sectors, for which the Government already has a successful track record in implementing the early stages of these reform programs.

B. Prior Actions, Results, and Analytical Underpinnings

Pillar A: Improving the Financial Viability of the Electricity and Water Sectors

Achieving Electricity Tariff Cost Recovery

Prior Action # 1: The Borrower's Council of Ministers has approved on February 22, 2015 the implementation of the annual electricity tariff adjustment planned for 2015 in accordance with the Borrower's 2013-2017 Electricity Tariff Adjustment Plan.

Indicative Trigger # 1: The Council of Ministers approves implementing the annual electricity tariff adjustments planned for 2016 and 2017 to reach cost recovery[20] in accordance with the 2013-2017 Electricity Tariff Adjustment Plan.

Indicative Trigger #2: The Energy and Minerals Regulatory Commission (EMRC) approves new tariff regulations to sustain cost recovery taking into consideration consumer affordability.

39. **Rationale**: The increased cost of electricity stemming from the sharp increase in fuel costs following the disruption of the Egyptian gas supply to Jordan incurred significant financial losses for NEPCO. In 2013, the Government developed a National Strategic Plan for Dealing with NEPCO's Losses to restore the financial situation of NEPCO. The plan includes a five-year (2013-2017) electricity tariff adjustment plan and measures to reduce the cost of generation supply through fuel and generation mix diversification. These tariff adjustments and generation cost reduction measures will allow electricity tariffs to reach cost recovery by 2017. The Government is implementing a five-year electricity tariff adjustment plan initially supported by the IMF SBA program. As the IMF SBA program is concluding in August 2015, the DPL prior action and subsequent triggers aim to ensure that the tariff adjustment plan will stay on track and that electricity tariffs will reach cost recovery in 2017. The proposed triggers also ensure that an adequate tariff pricing mechanism is developed to sustain cost recovery in the electricity sector after 2017, in order to maintain the sector's financial viability and strengthen its resiliency in coping with any future external fuel price shocks.

[20] Cost recovery in this case means financial cost recovery, which would include CAPEX, operational and maintenance as well as fuel costs, as measured by EMRC

40. **Substance**: The Government is implementing its five-year tariff adjustment plan and as a consequence of the electricity tariff increases in 2013 and 2014 by 15 percent respectively, NEPCO's revenues increased by JD208 million. Despite these increases, users paid on average a tariff of 10.3 fils/KWh, compared to a production cost of 18.5fils/KWh, which reflects the high cost of generation following the reduction of gas imports from Egypt. Following the tariff increase of up to 7.5 percent implemented by the Council of Ministers effective January 2015, the average electricity tariff is expected to increase to 10.8 fils/kWh which, depending on the average oil prices prevailing in 2015 and the volume and timing of LNG supply, will result in an improvement in cost recovery as shown in Table 4 below.

Table 4: Electricity Tariff Cost Recovery

	2014	2015 Scenarios		
Oil Prices (US$/bbl)	96.2	50	60	70
End User Cost of Supply (fils/kWh)	18.5	12.5	13.3	13.9
Average End User Tariff (fils/kWh)	10.3	10.8	10.8	10.8
Cost Recovery level[21]	56%	86%	81%	77%

41. The Government is committed to continue the implementation of further electricity tariff adjustments of up to 15 percent in 2016 and 2017 in accordance with the cost recovery objective of its five-year tariff adjustment plan. These planned tariff increases, in addition to reduction in generation costs thanks to the introduction of the LNG supply in summer 2015 and the operation of renewable energy plants in 2016 and onwards, will result in achieving full cost recovery for NEPCO in 2017. The additional revenues for these tariff increases over the 2015-2017 period are expected to reach up to JD600 million. Further, the EMRC is launching a major study, financed by *Agence Française de Développement (*AFD), to assess options to improve the electricity tariff structure and develop a more efficient tariff pricing mechanism which would be implemented when the electricity tariffs reach cost recovery by early 2017.

42. **Results Indicators**: Achieving electricity tariff cost recovery is measured by the cost recovery level of the end user electricity tariffs: Baseline (2014): The electricity tariff cost recovery is 56 percent. Target (2017): The electricity tariff cost recovery is 100 percent.[22]

Resolving NEPCO's Debt

Prior Action # 2: The Borrower's Council of Ministers has issued on July 14, 2015 a circular requesting the inter-ministerial debt committee to develop a debt management plan for the Borrower's national electric power company (NEPCO).

Indicative Trigger # 3: The Council of Ministers approves and implements a multi-year Debt Management Plan for NEPCO.

43. **Rationale**: NEPCO's accumulated debt had increased to JD4.7 billion by the end of December 2014. The Government's priority has been to focus on restoring the cost recovery of NEPCO by 2017 through a combination of tariff increases and fuel and generation diversification. While the Government has provided guarantees for NEPCO's outstanding debt, it acknowledges that the financial viability of NEPCO needs to be restored to enable the company to maintain its assets and invest in the expansion of its transmission network.

[21] Cost recovery assumes LNG supply will be available starting summer 2015 fueling 40 percent of power generation.

[22] Cost recovery in the electricity sector will be achieved by combination of electricity tariff adjustments and measures to reduce cost of fuel supply and generation under Pillar B.

44. **Substance**: Since 2011, NEPCO has been running deficits of around 4-5 percent of the GDP per year and accumulated a total operating loss of about JD4.7 billion. Since 2013, servicing this debt has been directly managed by the budget, as until recently commercial banks had not lent directly to NEPCO. Consequently, gross public debt rose rapidly and is estimated to have reached around 90 percent of the GDP at the end of 2014. High levels of government debt threaten the fiscal and external balances of Jordan. Furthermore, in the absence of a clear Government plan to address and restructure NEPCO's debt, the lack of NEPCO's creditworthiness will continue to hinder its ability to carry out its capital investment program and service its financing needs. Therefore, the Government is tasking its inter-ministerial debt management committee to develop a Debt Management Plan for NEPCO, which the Council of Ministers will subsequently approve and implement as part of the trigger for the second DPL.

45. **Results Indicators**: Resolving NEPCO's debt is measured by the development and implementation of a Debt Management Plan for NEPCO: Baseline (2014): NEPCO's debt servicing is managed through the budget and there is no specific NEPCO Debt Management Plan in place. Target (2017): NEPCO's Debt Management Plan under implementation and 2017 debt reduction target is achieved. The 2017 targets for reduction of NEPCO's debt will be defined during the preparation of the second DPL and the policy matrix in Annex 1 will be updated accordingly.

Enhancing Cost Recovery in the Water Sector.

Prior Action # 3: The Borrower's Council of Ministers has approved on September 14, 2014, bylaws No. 93 for 2014 including tariff adjustments for production wells in accordance with the Borrower's "Structural Benchmark Government Action Plan to Reduce Water Sector Losses" dated August 2013.

Indicative Trigger #4: The Minister of Water and Irrigation approves measures to increase sector revenues to enhance cost recovery[23] in accordance with the "Structural Benchmark - Government Action Plan to Reduce Water Sector Losses" dated August 2013.

46. **Rationale**: The water sector puts a significant burden on the fiscal budget. The sector provides large subsidies to agricultural and domestic water users. The sharp increase in electricity prices (to put NEPCO on a path of cost recovery) and the large influx of Syrian refugees have increased the urgency to improve the financial viability of the water sector. As the sector's fiscal gap is increasing from JD281 million in 2013 to a forecasted JD340 million in 2015, the Government has embarked on the Structural Benchmark Plan. This plan aims to ensure 100 percent operation and maintenance cost recovery and full cost recovery[24] of 74 percent by 2020 through a combination of revenue increases (mostly through tariff and fee increases) and efficiency improvements. Since the adoption of the Plan, the MoWI doubled the industrial groundwater charges in November 2013, implemented a 15 percent increase of wastewater tariffs for Amman in July 2014, and it also increased the charges for production wells in the highlands by 150 percent in September 2014.

47. **Substance:** The importance of using tariffs and charges as an instrument to use water more efficiently has been laid out in various Government water strategies. The Water for Life Strategy lays out the need to use pricing policies as an instrument to support demand

[23] Operation and Maintenance Cost recovery in this case means operational and maintenance cost recovery as measured by the MoWI covering the WAJ and the three regional Water Companies (Miyahuna, Aqaba and Yarmouk).
[24] The full cost recovery ratio is defined as MoWI the ratio where revenues would cover the sector's operation and maintenance costs and capital costs.

management – alleviating the pressure on already scarce water resources. The importance of pricing policies was reconfirmed in the recently published Vision 2025. Tariff increases will increase the level of cost recovery in the sector but will also have secondary benefits, as water will be used more efficiently and will be allocated to higher value uses. This process of re-allocating water, from lower to higher value users with an increasing share of the water being allocated to domestic and industrial use at the expense of water in the agricultural sector, is key in dealing with extreme water scarcity in the country. The plan foresees increases in water and wastewater tariffs, connection fees and groundwater charges. The increased groundwater charges in combination with energy price increases may decrease groundwater over-exploitation.

48. As demands on the water sector continue to increase, and the sector becomes increasingly dependent on alternative expensive water sources, the tariff increases will mainly reduce the fiscal burden, and thus create fiscal space for the new generation of expensive water investments (such as the proposed Red Sea Dead Sea project), However, tariff increases are unlikely to eliminate the total fiscal burden of the sector because of the extreme water scarce environment. The Structural Benchmark Plan that the Government developed shows that with a wide range of measures to improve revenues, and increase efficiency of service delivery the full cost recovery ratio will increase only to 74 percent by 2020 (compared to 59 percent in 2013).

49. **Results Indicators**: Achieving operation and maintenance water cost recovery is measured by operation and maintenance cost recovery level in the water sector: Baseline (2013): Cost recovery is 86 percent. Target (2017): Cost recovery is 100 percent.

Pillar B: Increasing Efficiency Gains in the Energy and Water Sectors

Diversification to cleaner fuel supply for power generation and scaling up development of domestic renewable energy resources and energy efficiency

Prior Action # 4: NEPCO has assigned adequate number of staff and implemented a capacity building program for said assigned staff to manage LNG supply to power generation.

Indicative Trigger # 5: NEPCO develops and implements fuel supply strategy to scale up share of gas supply in power generation.

50. **Rationale**: Natural gas share in the Jordanian power generation declined from 92 percent in 2009 to about 7 percent in 2014. Gas supply from Egypt has been replaced by more expensive and more pollutant diesel and HFO imports. To restore a larger share of natural gas supply to power generation, the Government developed an LNG receiving terminal which became operational in July 2015 and has signed LNG supply contracts for up to 250 mm ft^3/day. The proposed DPL prior action and trigger support the development of NEPCO's institutional capacity to manage LNG supply for power generation and develop and implement a medium-term fuel supply strategy to restore a larger share of natural gas supply for power generation.

51. **Substance**: The total installed power generating capacity in Jordan is about 3,453 MW, with a peak demand in 2013 of about 2,995 MW, and it is growing at an annual rate of 4.6 percent. More than half of the generation capacity, 2,385 MW, consists of natural gas-based combine cycle and open cycle gas turbines (OCGT) that since 2011 have largely been fueled by expensive diesel imports due to the interruption of gas supply from Egypt. The generation capacity also includes the recently commissioned reciprocated-engine power plants IPP3 (570

MW) and IPP4 (240 MW) with tri-fuel capability.[25] IPP3 and IPP4 have been specified to run on HFO with 1 percent sulfur content which must be imported since the refinery in Zarqa can only produce 3.5-4.0 percent sulfur HFO. The LNG terminal has a capacity of 500 mm ft3/day capacity and the Government has signed LNG supply contracts for 250 mm ft3/day (enough to fuel about 55 percent of the existing power generation). The price of the LNG under the signed contracts is indexed to oil prices and remains lower than prices of imported diesel and on par with prices of imported HFO. Now that the LNG terminal is operational, the contracted LNG will eventually supply existing Combined Cycle Gas Turbine (CCGT) and OCGT power plants, replacing the more expensive diesel import and yielding an expected savings of JD820 million over the 2015-2017 period. Natural gas supply for power generation will continue to present an economically and environmentally attractive option for Jordan. NEPCO will be responsible for the overall management and operation of the LNG terminal and is developing the institutional capacity necessary for managing and optimizing fuel supply for power generation to ensure least cost operation.

Prior Action # 5: The Borrower's Council of Ministers has approved on May 3, 2015, bylaws No. 50 for 2015 on renewable energy direct proposals.

Prior Action # 6: The Borrower's Council of Ministers has approved on May 3, 2015 the Jordan renewable energy and energy efficiency fund (JREEF) bylaws No. 49 for 2015; the JREEF board of directors has approved the business plan for JREEF; and the Borrower has allocated financing to operationalize JREEF.

Indicative Trigger # 6: The Ministry of Energy and Mineral Resources issues required regulations for implementation of Direct Proposal-bylaws and establishes a Public Data Room for Renewable Energy Development to improve transparency.

Indicative Trigger # 7: NEPCO implements in its Control and Dispatch Center operating procedures for integrating renewable power resources into the transmission grid according to the Control and Dispatch Center Operations Manual.

Indicative Trigger # 8: At least two of JREEF's Financing Windows are operating with Window Managers in place and JREEF annual reports are issued.

52. **Rationale**: Jordan recognizes that development of renewable energy is a key priority for diversification of its energy mix from domestic resources. The REEE law was therefore adopted in 2012 creating a regulatory and financial framework for REEE and mandating establishment of the JREEF. After a long delay the MoEMR established the JREEF and recently appointed its director. Furthermore, the Parliament amended the REEE Law in November 2012 requiring the development of bylaws to streamline investment procedures by direct proposals. The DPL proposed prior actions and triggers aim to support the operationalization of the JREEF, improve REEE regulations and transparency, and develop NEPCO's capacity to operate and integrate into the transmission grid renewable energy project planned for development through 2020.

53. **Substance**: In line with the National Energy Efficiency Action Plan (NEEAP) for Jordan, JREEF's main goal is to provide the funding necessary to exploit renewable energy and rationalize energy consumption by (a) supporting investments and sector stakeholders to conserve and/or generate energy, and in energy efficiency; and (b) improving the availability of financing and cooperation with local and international financial institutions under five

[25] IPP3 and IPP4 power plants can operate on diesel, HFO or natural gas.

financing windows including subsidy, guarantees, studies and technical cooperation, interest rate subsidy, and equity windows. Primary targeted sectors are Small and Medium Enterprises (SME) (industrial), tourism, health, households/residential and public buildings/facilities. JREEF is developing its bylaws and business plan for its operations. It also aims to put in place the required institutional set up to operationalize its financing windows to provide funding for targeted projects. The proposed DPL will support JREEF's effort in developing these regulatory instruments and the institutional set up required for its effective operation.

54. On the renewable energy side, the Ministry of Energy and Mineral Resources has made significant progress in signing contracts, mainly with the private sector through direct proposal submission, for developing up to 900 MW of wind and solar projects planned for commissioning between mid- 2015 to 2020. The proposed DPL supports efforts by the Ministry of Energy and Mineral Resources for developing required bylaws and regulations. It will also support the development of a renewable energy public data room to streamline procurements and improve transparency, which will increase investors' and public confidence in the credibility and reliability of the next phase of renewable energy development in Jordan. The proposed DPL also supports improving NEPCO's operating and dispatch procedures to integrate a larger scale of renewable resources into the transmission grid, which by the end of 2017 is expected to be about 10 percent of the total power generation, which could yield total reduction in the generation cost of up to JD 340 million.

55. **Results Indicators**: Diversification to cleaner Fuel Supply for Power Generation and scaling up development of domestic Renewable Energy Resources and Energy Efficiency is measured by: (1) Increase in share of gas supply to power generation: Baseline (2014): 7 percent of fossil fuel generation supplied by natural gas. Target (2017): 70 percent of fossil fuel generation supplied by natural gas; and (2) Increase in share of MW renewable power in the generation mix. Baseline (2014): Renewable power generation is 0 percent of the generation mix. Target (2017): Renewable power generation is 10 percent of the generation mix.

Development of Electricity Distribution Networks Loss Reduction Program

Indicative Trigger # 9: A multi-year Network Loss Reduction Program agreed upon between EMRC and the distribution companies is finalized with yearly loss reduction targets and is under implementation**.**

56. **Rationale**: The distribution sector has been privatized in Jordan to three distribution companies. In 2013, the total losses in the electricity system in Jordan were reported at 17 percent (of which 13.8 percent was in the distribution networks) which is high according to best practice industry standards. Reducing losses in the distribution networks will provide substantial cost savings and increase the overall efficiency in the distribution sector. The proposed DPL trigger supports implementation of a Distribution Network Loss Reduction program agreed upon between the distribution companies and EMRC.

57. **Substance**: The Government's program to improve overall operational efficiency in the electricity sector requires improving the efficiency and performance of the distribution companies by reducing losses in their networks, in accordance with recommendations to be developed by a study under preparation jointly by the EMRC and the distribution companies. The study aims to develop accurate baselines and targets for the technical and commercial losses in the distribution networks, identify areas in the network with high losses, and recommend improvement measures to reduce network losses. The study is planned to be completed in late 2015 and will provide the technical basis for updating and continued

implementation of the Distribution Network Loss Reduction program agreed upon between the EMRC and distribution companies.

58. **Results Indicators**: Reduction in electricity distribution network losses is measured by: Baseline (2014): The distribution sector has losses of 13.8 percent and lacks a multi-year loss reduction targets. Target (2017): Network Loss Reduction Program is under implementation and 2017 loss reduction target is achieved. The 2017 targets for distribution network loss reduction will be defined during the preparation of the second DPL and the policy matrix in Annex 1 will be updated accordingly.

Scaling up of Energy Efficiency and Renewable Energy in the Water Sector

Prior Action # 7: The Borrower's Council of Ministers has approved on June 2, 2015 an energy efficiency and renewable energy policy for the water sector.

Indicative Trigger # 10: The Ministry of Water and Irrigation has a dedicated budget line provision sufficient to implement its planned energy efficiency activities as laid out in the energy efficiency and renewable energy policy for the water sector.

59. **Rationale**: The water sector in Jordan is very energy intensive, and this intensity has increased over time. In 2005, the sector used 1.32 kWh per cubic meter of water used, compared to 2.30 kWh per cubic meter in 2013. Water and wastewater production, distribution, and treatment normally requires energy, but with water resources being located at a considerable distance from population agglomerations, water needs to increasingly be distributed and pumped over often large distances and lifted to overcome altitude differences. As a result, about 14 percent of electricity consumption in the country is used in the water sector, amounting to 2,076 GWh in 2013, of which WAJ consumed 1,354 GWh, JVA 70 GWh with the remainder used by private well users. Water pumping was charged against preferential rates of JD0.076 per kWh in 2013 which is below the average cost of electricity supply of JD0.185 per KWh. This results in annual Government subsidies for electricity consumption in the water sector of up to JD226 million. While the Government is addressing the dismantling of electricity subsidies, it also recognizes that more efficient electricity consumption is essential to improve the sector's operational and financial performance.

60. **Substance**. In Jordan's Second National Communication to the United Nations Framework Convention on Climate Change in 2009, the Government gave high priority to energy efficiency in all main sectors. The Council of Ministers approved the NEEAP in June 2013. The NEEAP aims to achieve a 20 percent targeted decrease in electricity consumption by 2025. The water sector is expected to decrease its electricity consumption through a phased approach, in which the first phase – supported by the German Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) – is expected to improve the energy efficiency of the Water Authority of the Jordan. The MoWI has identified energy savings for water pumping and other water sector-related activities as a priority, is reflected in the Structural Benchmark Action Plan. The proposed DPL will support the Government's efforts in developing the policy framework to use energy more efficiently in the water sector in order to improve cost recovery in the sector. Yet energy efficiency improvements will also help to reduce the carbon footprint of the sector by reducing emissions, and decrease the impact of volatile energy prices on the financial sustainability of the sector.

61. **Results Indicators**: Scaling up implementation of energy efficiency and renewable energy in the water sector is measured by an increase in energy efficiency savings[26] in the water sector as per the implementation of the Action Plan accompanying the Energy Efficiency and Renewable Energy Policy: Baseline (2013): Annual energy efficiency savings are 0 GWh. Target (2017): Annual energy efficiency savings are 50 GWh.

Optimizing allocation of water resources

Prior Action # 8: The Borrower's Minister responsible for water and irrigation has approved a surface water utilization policy aimed at regulating surface water utilization in Jordan.

Indicative Trigger # 11: The Minister of Water and Irrigation approves a Water Substitution policy.

Indicative Trigger # 12: The Ministry of Water and Irrigation has a dedicated budget line provision sufficient to implement its planned actions to optimize its water resources as laid out in the surface water utilization and water substitution policies for the water sector.

62. **Rationale**: The per capita available renewable water resources are dropping steadily due to population growth. In 2013, the surface water annual yield was about 362 MCM, which is about 40 percent of the total water annual yield. As a result, the country still depends disproportionally on groundwater resources causing over-exploitation of these resources. The Government is developing policies to optimize the use of its water resources. These policies aim to achieve a more efficient use of the existing surface water resources. With an ever increasing demand for water, and very limited supplies, the Government is implementing measures to use fresh water for activities that generates the highest value and aims to reduce the volume of fresh water to the agricultural sector in the long run by increasingly substituting fresh water with treated wastewater to supply farmers and industry.

63. **Substance**: The use of marginal sources of water and a more efficient use of current water sources is becoming increasingly important in a country where water is so scarce. The Water for Life Strategy lays out the importance of reducing the over-exploitation of groundwater resources, and the importance of efficiently storing and using surface water, while increasingly relying on treated wastewater as a non-conventional water source for low-value water uses. A major element of using surface water resources more efficiently will include measures that aim to increase the cost of groundwater through a combination of measures that focus on reducing energy subsidies and increasing groundwater abstraction charges. The Structural Benchmark Plan for the water sector foresees increases in groundwater charges for different water users that are likely to affect the use of groundwater; whereas the further reduction of energy subsidies will increase the cost of groundwater abstraction. At the same time, the Government aims to use surface water sources more effectively through a set of measures aimed to increase rainwater harvesting, land use measures to protect groundwater infiltration, and improvements in storm water management. Throughout the last decade, several large reservoirs have been constructed to collect flood water for irrigation. In 2013 the total storage capacity of reservoirs was estimated at 326 MCM. These priorities and needs are confirmed in the Jordan 2025 Vision.

[26] Increases in energy efficiency will be measured by the change in the total electricity consumption in the WAJ between 2013 and 2017.

64. The Government has also rapidly increased dependence on treated wastewater as a non-conventional source of water. The Government's Wastewater Management Policy mainly focuses on the re-use of treated wastewater for irrigation, but also considers the use of such water for recycling, cooling and power generation. A study undertaken by the United States Agency for International Development (USAID) put the cost of blended treated wastewater at JD0.24 compared to JD0.389 for freshwater. The 2011 GIZ study "Toward Safe Use of Treated Wastewater," developed a plan for a risk monitoring and management system for the use of treated wastewater in irrigation. The Structural Benchmark Plan for the sector foresees increases of water and wastewater tariffs for households and industries which can further increase the value of freshwater and may accelerate the reuse of treated wastewater in irrigation. The Government plans to sell part of the treated wastewater of the As-Samra wastewater plant to power plants and using the sludge generated from the treatment process to increase its revenues and reduce the fiscal deficits generated by the water sector. The MoWI is developing policies, supported by the proposed DPL, to define objectives and measures for water substitution and surface water utilization to ensure the sustainability of the Government's efforts in improving water utilization in Jordan.

65. **Results Indicators**: Optimizing allocation of water resources is measured by: 1) Water is more optimally allocated: Baseline (2013): 123 MCM of surface water used for municipal water use. Target (2017): 128 MCM of surface water used for municipal water use; and 2) Volume of treated wastewater used for non-domestic uses: Baseline (2013): 110 MCM. Target (2017): 135 MCM.

66. **The proposed DPL is underpinned by government strategies and a series of analytical and advisory tasks, programmatic technical assistance, and projects**. The proposed policy actions and outcomes are founded on the continuous engagement of the World Bank and donors supporting the development of the energy and water sectors in Jordan and on sector assessments and development plans developed by the Government and summarized in Table 5.

Table 5: Prior Actions and Analytical Activities Underpinnings

Prior Actions	Analytical Underpinnings
Pillar A: Improving the Financial Viability of the Electricity and Water Sectors	
Prior action #1: The Borrower's Council of Ministers has approved on February 22, 2015 the implementation of the annual electricity tariff adjustment planned for 2015 in accordance with the Borrower's 2013-2017 Electricity Tariff Adjustment Plan.	National Strategic Plan for Dealing with NEPCO's Losses. Government policy paper. 2013 An Assessment of the Jordan 2012 Petroleum Subsidies Reform and Cash Compensation Program. World Bank note. 2013 An Analysis of Consumption Subsidies. World Bank draft note. 2011 Electricity Subsidies and Household Welfare in Jordan Can households afford to pay for the budget crisis? World Bank background paper. 2011 IMF Jordan Staff Reports for Article IV. IMF. 2013-2015 Restructuring Retail Electricity Tariff in Jordan. AFD technical assistance to EMRC. To be launched.

Prior action #2: : The Borrower's Council of Ministers has issued on July 14, 2015 a circular requesting the inter-ministerial debt committee to develop a debt management plan for the Borrower's national electric power company (NEPCO).	Council of Ministers circular issued on July 14, 2015, tasking the inter-ministerial debt committee with development a Debt Management Plan for NEPCO IMF Jordan Staff Reports for Article IV. IMF 2013-2015
Prior Acton # 3: The Borrower's Council of Ministers has approved on September 14, 2014, bylaws No. 93 for 2014 including tariff adjustments for production wells in accordance with the Borrower's "Structural Benchmark Government Action Plan to Reduce Water Sector Losses" dated August 2013.	Water for Life Strategy: Government Document. 2009 The Structural Benchmark – Government Action Plan to Reduce Water Sector Losses. Government Document. 2013 The Water Public Expenditure Perspectives, USAID. 2011 Charge a Fair Price for Water, USAID, 2011 Improve the Targeting of Domestic Water Subsidies, USAID, 2011 IMF Jordan Staff Reports for Article IV. IMF. 2013-2015 The Cost of Irrigation Water in the Jordan Valley, World Bank, 2015
Pillar B: Increasing Efficiency Gains in the Energy and Water sectors	
Prior action #4: NEPCO has assigned adequate number of staff and implemented a capacity building program for said assigned staff to manage LNG supply to power generation.	NEPCO's staffing assessment and assignment NEPCO's Training Program on LNG Supply and Facility Operation.
Prior action # 5: The Borrower's Council of Ministers has approved on May 3, 2015, bylaws No. 50 for 2015 on renewable energy direct proposals.	Renewable Energy Technical Assistance Support – Financed by the World Bank managed GEF for the Promotion of A Wind Power Market. 2010-2012.
Prior action # 6: The Borrower's Council of Ministers has approved on May 3, 2015 the Jordan renewable energy and energy efficiency fund (JREEF) bylaws No. 49 for 2015; the JREEF board of directors has approved the business plan for JREEF; and the Borrower has allocated financing to operationalize JREEF.	Development of Institutional and Operating Arrangements for the Jordan Renewable Energy and Energy Efficiency Fund. Government Document. 2007 JREEF Business Plan: 2015
Prior action # 7: The Borrower's Council of Ministers has approved on June 2, 2015 an energy efficiency and renewable energy policy for the water sector.	Improvement of Energy Efficiency of the Water Authority of Jordan. GIZ technical assistance to WAJ. 2008-2014. Efficiency and Renewable Energy Policy in the water Sector. Government Document. 2015
Prior action # 8: The Borrower's Minister responsible for water and irrigation has approved a surface water utilization policy aimed at regulating surface water utilization in Jordan.	Jordan's Water Strategy 2008 – 2022. Government Document. 2009 None- Revenue Water Reduction Programs, USAID, 2011 Towards the Safe Use of Treated Wastewater, GIZ, 2011 Surface Water Utilization Policy. Government Document. 2015"

C. Link to Country Partnership Strategy (CPS), Other Bank Operations, and the World Bank Group Strategy

67. **The overarching strategic objective of the World Bank Group's Country Partnership Strategy (CPS) for Jordan 2012-2015 (Report 58114-JO) discussed by the Board of Executive Directors in February 2012 is laying a foundation for inclusive growth.** Given recent changes in the regional context, the CPS Progress Report (Report 87054-JO) discussed by the Board of Executive Directors in June 2014 focused on the need for Jordan to adapt to evolving circumstances. The Bank's support focuses on mitigating the immediate impact of the regional crisis while at the same time supporting long term development objectives and structural reforms, which this DPL series targets. In addition, the proposed DPL contributes to Pillar I of the original CPS ("strengthen fiscal management and increase accountability") as it aims to increase efficiency of public expenditures and revenue generation therefore generating stronger economic growth in the medium term.

68. **Policies supported by the proposed DPL will contribute to the World Bank Group's strategic goals of ending extreme poverty and promoting shared prosperity in a sustainable manner.** Reducing the fiscal burden of electricity and water subsidies will allow the Government to achieve greater fiscal sustainability and therefore provide the Government with the space to invest in pro-poor programs and in the more inclusive and productive economic and social sectors to improve the standard of living of the population in Jordan.

69. **The operation was jointly prepared with the Macro-Fiscal and Social Protection teams, given its fiscal impact and social protection underpinnings with regard to social safety nets.** The proposed DPL operation focusing on improving the financial performance of the water and energy sectors is appropriate follow up to the ongoing programmatic DPL series of which the second DPL is closing in September 2015 and has supported fiscal management, public sector spending efficiency, private sector-led growth, and governance. The National Unified Registry project financed by the MENA Transition Fund is supporting the Government's cash compensation transfer program which will improve the efficiency of delivering future cash transfers in Jordan. The operation also complements ongoing World Bank support to the energy sector supporting renewable energy development and the proposed Partial Risk Guarantee to the water desalination plant under the Red Sea-Dead Sea Water Conveyance Program, given this program's potential/future impact on water supply in Jordan.

D. Consultations and Collaboration with Development Partners

70. **The Government developed its water and energy development programs through public and parliamentary consultations.** The Government's development programs in the water and energy sectors are guided by the diversification objectives of the following two strategies: the Energy Strategy developed in 2007 and the Water for Life Strategy in 2009, which were both developed following wide public consultation. In addition, any draft laws and amendment, budgetary support, including tariff adjustment that may be required for the implementation of these strategies undergo intensive public discussion in Parliament. The Government's standard practice is that secondary regulations and bylaws are first published on the Government's website for a minimum of ten days for public comment before Government's approval. The Jordan 2025 Vision has also been widely consulted with civil society organizations, political parties and business associations. Furthermore, new electricity tariff regulations to be developed by EMRC to sustain electricity cost recovery will ensure public

participation and engagement in the tariff setting process and will further enhance transparency in pricing regulations. During the DPL implementation, the World Bank will provide the Government with advisory support on best international practices for developing communication strategies to help generate and sustain broader political and public support throughout the tariff reform process.

71. **The energy strategy supported by the DPL builds on energy programs of the development partners in Jordan.** The Government has broad cooperation with international financial institutions and governmental agencies. Jordan's development partners, including the World Bank, are particularly active in the energy sector through investment financing and capacity building and technical assistance. The GEF Promotion of a Wind Power Market Project, which closed on June 30, 2015, supported the development of the renewable energy regulatory and pricing frameworks in Jordan, which provided the enabling framework for Jordan's successful experience in scaling up renewable energy development. The World Bank's Amman East Partial Risk Guarantee Project also supported development of the first IPP power plant. More recently, the International Finance Corporation (IFC) is among the financiers of the Tafila Wind IPP (Jordan's first renewable energy IPP expected to be operational by September 2015) and seven solar PVs projects (expected to become operational in 2016). The USAID has established the Energy Sector Capacity Building (ESCB) Program to coordinate its efforts in the power sector. The program promotes the electricity sector management, renewables and energy efficiency in Jordan. The AFD has been pursuing its efforts to promote "green credit lines" extended to local banks and is considering financing the Green Transmission Corridor in collaboration with the European Investment Bank (EIB).

72. **Development partners have supported the water sector in its efforts to reduce the fiscal burden**. In particular, USAID supports capital investments to reduce non-revenue water. It also focuses on improving groundwater management and more efficient water use. The AFD helps in improving Jordan's performance in the water sector and provides investments to support surface water and water substitution efforts aimed at maximizing the reuse of treated wastewater for irrigation purposes. The Millennium Challenge Corporation finances an extension of the As-Samra wastewater treatment plant, whereas GIZ, the German KFW Development Bank (KFW) and Kuwait provide support for energy efficiency and renewable energy interventions. The proposed DPL supported program to improve the financial viability of the water sector is in line with an AFD policy-based program under preparation in the water sector and with a recently approved Japan International Cooperation Agency (JICA) multi-sector policy based loan.

V. OTHER DESIGN AND APPRAISAL ISSUES

A. Poverty and Social Impact

73. **The implementation of the policy actions in this DPL are expected to have very modest poverty and social impacts on residential consumers overall**. The programs and the policies that the DPL supports are expected to help: (a) improve the efficiency with which the energy and water sectors provide services to their customers, which is likely to reduce the real cost of the provision of energy and water services, and thus have a positive effect on affordability; and (b) enable significant energy efficiency and renewable energy investments that would reduce air pollution (and hence reduce its impact on public health), while it would also have a dampening effect on groundwater withdrawals (that are already over-exploited in

Jordan). Moreover, evidence is emerging that high energy subsidies are associated with slow economic growth and high unemployment; reducing energy subsidies may hence have a longer-term positive effect on economic growth and employment from which the poor can benefit.[27] However, even though poor households spend less on electricity and water, their budget shares are higher. This makes poor households more vulnerable to higher tariffs.

74. **The Government is however mitigating the impact of electricity prices on the poor and vulnerable by limiting price increases to household consumption above 600 kWh.** The income effect of increasing tariffs is particularly relevant for electricity as households spend an estimated JD270 on electricity per year. Water spending is significantly lower. A simulation done by Verme, Aziz and Serajuddin[28] (forthcoming) shows that applying 2015 electricity tariffs has little impact on the per capita welfare of households if the current tariff structure is used. Only 9 percent of households consume more than 600 Kwh per month. Because of the increasing block rate structure, the impact of tariff increases for this group of high-consuming households is hence negligible. More extensive policy simulations with the World Bank Subsidy Simulation Module (SUBSIM) model that include the full programmed annual electricity tariff increases in accordance with the 2013 – 2017 Electricity Tariff Adjustment Plan show that the direct welfare impact on residential consumers, including the poor and vulnerable, is positive because of the limit on price increases in the lower consumption blocks. The current structure of the tariff increases means that in real terms electricity consumed by more than 90 percent of households will be cheaper in 2017 than it was before the tariff increases were implemented. The indirect welfare losses[29] related to the increase in electricity tariffs in the industrial and commercial sectors are, however, estimated at about 1.5 percent of household expenditures (as higher tariffs in these sectors will be mostly passed through to customers). The indirect welfare impacts[30] are more or less uniform across consumption quintiles. As richer households consume more than poorer ones, the larger absolute losses for richer households do not automatically translate into larger losses relative to the households' own budgets. Despite these indirect welfare losses, the combined direct and indirect welfare losses will be small as can be seen in Table 6.

75. **The Government's Action Plan to Reduce Water Sector Losses has built in measures to mitigate the impact of water tariffs on the poor and vulnerable by increasing revenues over many different water consumers.** The action plan includes tariff increases not only for residential and non-residential water and wastewater users, but also for agricultural and industrial ground water users through a combination of changes in tariffs and fee structures. The water tariff restructuring in 2011 has left the water and wastewater sectors with a tariff structure that allows for the price impact to be mostly felt by residential users who use large quantities of water and non-residential users. Policy simulations of the estimated increase in residential water tariffs found that the impact of such increases on household welfare, approximated by the change in household expenditures, is estimated to be equivalent to 0.27

[27] World Bank, 2014. MENA Economic Monitor: Corrosive Subsidies. Washington DC, 2014.

[28] Verme, P., U. A. Aziz and U. Serajuddin, forthcoming. Subsidies Reform in Jordan

[29] The indirect effects are calculated via the households' entire consumption basket.

[30] In order to generate the indirect welfare impacts, a Jordanian Input-Output table was used to estimate the price changes in all production sectors that use electricity and water as an input either directly or indirectly. The estimate is made under "cost push" assumptions within a price-shifting model: producers pass on any increase in input prices by raising sales prices by a proportional amount. We then use the Household Income and Expenditure Survey (HIES) to link household consumption expenditures to these production sectors and program, for consumption taking place in each sector, how much the price of that consumption block is likely to rise when electricity and subsidies are reduced.

percent of the household expenditure for the bottom quintile declining to 0.14 percent for the top quintile (Table 6). Unlike electricity, water consumption levels do not dramatically differ between poorer and richer households.[31] The direct welfare impact on residential consumers, including the poor and vulnerable, is limited which is the result of the smaller size of the proposed water tariff increases and the smaller share of water in the total household expenditure. The indirect welfare losses related to the increase in water tariffs[32] are estimated at about 0.1 percent of household expenditures, and are more or less uniform across consumption quintiles. Hence, just like the electricity tariff increases, the combined impacts of the water tariff increases has a very small impact on household welfare.

Table 6: Direct and Indirect Welfare Losses on Residential Consumers for Cumulative Electricity and Water Tariffs between 2012 and 2017 as percentage of pre-reform welfare (in JD per capita per annum)

Sector	Quintile 1		Quintile 2		Quintile 3		Quintile 4		Quintile 5	
	JD	%	JD	%	JD	%	JD	%	JD	%
Electricity										
Direct	n.a.	*n.a.*	n.a.	*n.a.*	n.a.	*n.a.*	n.a.	*n.a.*	n.a.	*n.a.*
Indirect	14.43	*1.7%*	21.49	*1.7%*	28.31	*1.7%*	37.63	*1.7%*	70.76	*1.6%*
Total	14.43	*1.7%*	21.49	*1.7%*	28.31	*1.7%*	37.63	*1.7%*	70.76	*1.6%*
Water										
Direct	0.93	*0.1%*	1.38	*0.1%*	1.81	*0.1%*	2.42	*0.1%*	4.52	*0.1%*
Indirect	2.31	*0.3%*	2.83	*0.2%*	3.00	*0.2%*	3.65	*0.2%*	6.30	*0.1%*
Total	3.24	*0.4%*	4.21	*0.3%*	4.81	*0.3%*	6.07	*0.3%*	10.83	*0.2%*
Electricity and Water Combined										
Direct	0.93	*0.1%*	1.38	*0.1%*	1.81	*0.1%*	2.42	*0.1%*	4.52	*0.1%*
Indirect	16.74	*2.0%*	24.32	*2.0%*	31.32	*1.9%*	41.28	*1.9%*	77.07	*1.8%*
Total	17.67	*2.1%*	25.70	*2.1%*	33.12	*2.0%*	43.69	*2.0%*	81.59	*1.9%*

76. **Ongoing monitoring of the impact of the program will be supported by additional analytic work on energy and water tariff increases and their poverty and social impact by the Bank**. The very modest impacts of the proposed policy actions on poor consumers do not necessarily require a support mechanism[33] to offset the poverty and social impacts. The Bank will undertake more policy simulations during the implementation of the DPL series as soon as new Household Income and Expenditure Surveys become available to determine in how far the changes in household income and expenditure between 2010 and 2015 and beyond will affect the capacity of poor and vulnerable consumers to deal with the proposed electricity and water tariffs. The effect of different tariff structures (including cross subsidies) on affordability and

[31] Kristin Komives, Vivien Foster, Jonathan Halpern, and Quentin Wodon with support from Roohi Abdullah, 2005. Water, Electricity, and the Poor: Who Benefits from Utility Subsidies? World Bank, Washington D.C.

[32] It is assumed that the water tariff increases are the same across sectors. In case the government pursues cross-subsidy policies, the indirect effects will be larger. Price elasticity effects in the water sector tend to be relatively low, and hence have not been considered here.

[33] It should be noted that the Government was able to mitigate the effect of a much more radical 2012 fuel subsidy reform by introducing the Fuel Cash Compensation Program applied earlier during periods of high oil prices. Therefore, in the context of electricity and water tariff increases, the Government could use a similar compensation mechanism managed by the Income Sale and Tax Department (ISTD) to mitigate impact of price increases. Particularly, with the development of the National Unified Registry, it will be possible to rank households and target the cash compensation scheme to those who will be the most affected by the tariff increases.

financial sustainability will be part of the follow-up work for trigger 2 of the second DPL in which the EMRC will develop and approve new tariff regulations to sustain cost recovery while taking into consideration consumer affordability.

77. **Jordan has, however, the instruments in place to deal with the adverse, short-term effects of tariff increases through the cash transfer program.** The fuel cash transfer program that was set up in 2012 to alleviate the effect of the subsidy reform for petroleum products compensated 70 percent of Jordanian households.[34] The recent progress to develop a unified national registry will enable the Government to set up a more targeted cash transfer program that may help if necessary to ease any effect of tariff increases on poor households. However, the above mentioned policy simulations show that a compensation system to mitigate impact of electricity and water tariff increases is not directly warranted.

B. Environmental Aspects

78. **The implementation of the policy actions supported by the proposed DPL is not likely to have significant impact on environment, forests, and natural resources.** Over the last 15 years, the Government has made significant strides in mainstreaming environmental sustainability in projects, starting first with the environmental protection law no.1 of 2003 and then the Environmental Impact Assessment (EIA) regulations of 2005. The EIA regulations No. 37 approved in 2005 clearly defined the process and requirements for the EIAs, and created screening, review and oversight structures for implementation; under the overall supervision of the EIA Directorate in the Ministry of Environment.

79. **The Environment Law, under which the Ministry of Environment operates, is considered as a strong law because it grants the Ministry the necessary powers to perform its duties and tasks**. The Ministry of Environment started in 1980 as a small department at the Ministry of Municipal, Rural and Environmental Affairs. In 1996, the General Organization for Environmental Protection was established and given responsibility for protecting the environment in Jordan. In 2003 the Ministry of Environment was established, according to the temporary Environmental Protection Law (EPL) (no.1); this was then approved as EPL (no.52) in 2006. The EIA Directorate has the capacity to follow up on mitigation and monitoring measures of potential environmental impacts of development projects. In addition to the National EIA system, a different system is in place for the Aqaba Special Economic Zone which has a different governing body called Aqaba Special Economic Zone Authority (ASEZA) created under the ASEZA Law no.32 of 2000.

80. **Many features of the Jordanian Environmental Assessment (EA) system are compatible with the World Bank EA Policy (OP 4.01) as well as with the European Commission EIA Regulations no. 97/11**. An Inter-ministerial Central Licensing Committee classifies projects into the following categories based on location, magnitude, irreversibility, and severity of impacts: Category 1 (full EIA required); Category 2 (initial EIA is required); and Category 3 (no environmental analysis is required). Public participation is required at the scoping stage, and the Ministry of Environment/ASEZA is responsible for regular monitoring of the Environmental Management Plan (EMP) and reporting. Many features of the Jordanian EA system are compatible with the World Bank EA Policy (OP 4.01) as well as with the European Commission EIA Regulations no. 97/11. These features are: (a) screening; (b) scoping; (c) EIA report content; (d) content of the Environment Management Plan; (d)

[34] Araar, A, E. Le Borgne, U. Serajuddin and P. Verme, 2013. An Assessment of the Jordan 2012 Petroleum Subsidies Reform and Cash Compensation Program. The World Bank, Report no. 79837.

provisions for appeal; and (e) requirements for monitoring and evaluation. As per the EIA regulation no. 37/2005, the Technical Review Committee consists of the representatives of the following agencies: Ministries of Environment, Planning and International Cooperation, Municipal Affairs, Health, Agriculture, Industry and Trade, Energy and Mineral Resources, Water and Irrigation, Tourism and Antiquities, and Public Works and Housing, in addition to representatives from NGOs and academia.

81. **As per OP 8.60, the World Bank assessed whether specific country policies supported by the DPL series are likely to cause significant effects on the country's environment, forests, and other natural resources.** The assessment concluded that the policies supported by the proposed DPL are not likely to have negative impacts on the country's natural assets. The tariff reform programs supported under Pillar A that aim to improve the financial viability of the electricity and water sectors, can also help in curb the growth in energy and water demand resulting in less environmental degradation. Similarly, efficiency gains programs under Pillar B promoting growth in REEE development and deeper utilization of natural gas in power generation instead of the more polluting fuel oil and diesel will noticeably improve air quality by reducing energy-related emissions, by as much as 23.5 mt CO2, thus improving air pollution and reducing the related impacts on human health.

82. **Negative environmental impacts from the DPL-supported reforms may result from identified priorities for investments in infrastructure, such as construction of reservoirs to collect surface water**. Jordan, however, adopted in 2005 an EIA regulation (regulation 37/2005) to regulate the EIA process, in terms of scope of application, substantive requirements, and procedures of approval. The existing EIA regulation has been assessed as robust. The construction of reservoirs and other water infrastructure related policy actions will be subject to the existing EIA regulation. Any significant negative environmental effect is likely to be avoided or mitigated.

C. Public Financial Management, Disbursement, and Auditing Aspects

83. **Public Financial Management (PFM)**: The Government continues to have PFM reforms as a priority. The Ministry of Finance's (MoF) PFM Strategy for 2014-2017 emphasizes the continuous improvement of the PFM function. In recent years Jordan has made significant progress in PFM reforms. This progress includes the following:

a. Strengthening the reforms on the Medium-Term Expenditure Framework (MTEF) consolidation and introduction of Results Oriented Budgeting (ROB) that were initiated in 2008.

b. Transparent and comprehensive budget documentation, as well as a defined budget process with both executive and legislative branches adhering to the schedule, and a budget classification which complies with international standards. The annual budget and final accounts are published on the MoF website.

c. The completion of the roll-out of the Government Financial Management Information System (GFMIS) for budget preparation and execution to all 53 budget units (ministries, departments, and regional financial centers).

d. Establishing mechanisms designed to facilitate regular monitoring of arrears and introduction of a more effective commitment control system to prevent arrears accumulation. This has entailed a team designated from the MoF to track and monitor arrears, and the introduction of annual and quarterly commitment requests and financial

plans, which together with the GFMIS monthly financial position reports show uncommitted balances.

e. The MoF is considering the adoption of accrual accounting to replace the existing cash accounting approach. The GFMIS will provide an important tool for implementing such a reform.

f. The implementation of Treasury Single Account (TSA).

g. A unified financial controls by-law that is applied to all government institutions; including independent institutions aiming to address the redundancies and multiplicity of controls hampering the efficiency of control.

h. A new Audit Bureau Law, approved by the Council of Ministers yet pending the Parliament endorsement, was introduced. It aims to provide more independence and a greater focus of this institution on performance audit and on ex post controls, consistent with International Standards for Supreme Audit Institutions.

84. While many PFM reforms have been progressing, there are a number of issues that need to be addressed to fully realize the benefits of the above reforms and help the Government to restore fiscal sustainability, specifically:

a. The initial strategic planning phase of budget preparation is not sufficiently developed and the subsequent budget preparation phase is characterized by spending plans and budget requests that greatly exceed the eventual budget settlement[35]. The macro-fiscal framework should be strengthened, sector strategy review and planning should be effectively integrated in the budget process, and stronger commitment to MTEF indicative allocations.

b. Public sector expenditure arrears continue to be a problem. The GFMIS does not allow multiple quarter and multiyear commitments entries; and capturing and populating the outstanding commitments and outstanding invoices for arrear monitoring. As a result, the Government has not fully benefited from the GFMIS to monitor the problem.

c. While the unified financial controls by-law has some positive elements such as regulating the function, setting standard procedures and requiring regular planning and reporting, it led to widespread confusion over the definitions and functions of the various parties responsible for internal control and internal audit, and the by-law has done little to dispel the confusion. A revised Financial Controls By-Law (No 114 of 2015) was issued, which includes positive elements such as establishing the internal audit function within the existing internal control units, defining broadly the role of internal audit and internal control functions with separation of responsibilities and duties, and having new members from academia and Jordan Association of Public Accountants (JACPA) to the Central Committee for internal financial controls responsible of reforming and developing the internal financial controls function in the public sector.

d. Jordan Supreme Audit Institution (Audit Bureau) continues to undertake comprehensive pre-audit checks, thus entering into the decision making process of line ministries interfering with its function as an external auditor. Improving the Audit Bureau's independence and strengthening internal controls at the same time would substantially

[35] The World Bank is providing substantial technical assistance that aims to improve Jordan Public Investment Management System (PIMS) which will address weaknesses in investment planning and budget preparation and execution.

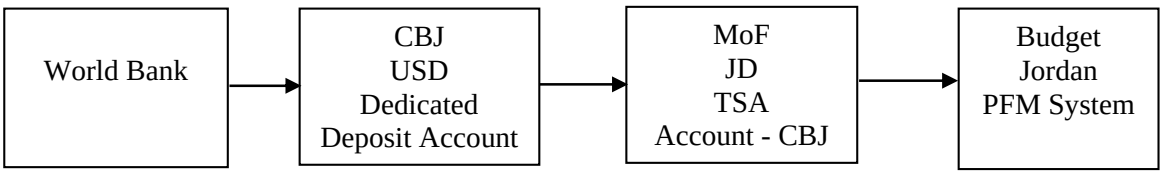
improve the quality of external audits leading to more effective assurance over the use of public funds. The new Audit Bureau Law addresses largely the latter reported issues yet still awaits the parliament approval to become effective.

85. **Foreign Exchange**: The foreign exchange control environment is assessed to be generally satisfactory. The CBJ was subject to the IMF safeguards assessment in June 2003, which was updated in January 2013. The IMF updated safeguard assessment of 2013 reflected on the CBJ's progress in strengthening its safeguards as the majority of measures recommended in the June 2003 were either partially or fully completed. The assessment proposed a set of measures to strengthen CBJ governance, including external auditing and financial reporting, which the majority are work on progress.

86. The CBJ financial statements are annually audited by a private independent auditor. The auditor issued a qualified opinion on the CBJ's financial statements for the year ended December 31, 2013. The main qualifications are the same of 2011, and 2012 related to: i) no provision taken in the financial statements for doubtful debts, and ii) stating non-interest bearing financial instruments, long term deposits, and debt bonds based on their nominal values instead of stating them at their net present values. No material internal control issues that could impact the disbursement from the proposed Development Policy Operation were reported. The audit report and financial statements of the CBJ are available on the CBJ website. Taking into consideration the status of the above mentioned assessments, and the review of the CBJ audit report of the year 2013, the foreign exchange control environment is assessed to be generally satisfactory.

87. **Disbursement Arrangements**: The proposed loan will follow the Bank's disbursement procedures for development policy operations and will be disbursed in a single installment. Once the loan is approved by the World Bank Group's Board and becomes effective, the proceeds of the loan will be disbursed in compliance with the stipulated release conditions and will be deposited by IBRD in an account designated by the Borrower and acceptable to the World Bank at the CBJ. The Borrower should ensure that upon the deposit of the loan into the said account, an equivalent amount is credited in the treasury current account at the CBJ. The administration of this loan will be the responsibility of the MoF. If the Bank determines at any time that an amount of the loan was used to make payment for excluded expenditure, the Borrower shall refund an equal amount of such payment to the Bank and such amount refunded to the Bank shall be cancelled from the loan.

88. The total amount of time between disbursement by the World Bank of the loan proceeds in US$ and the credit into the treasury current account should not exceed 30 days. The MoF will furnish to the Bank, within 30 days, a confirmation of this transfer; advising that the total sum of the loan has been received. The diagram below depicts the envisaged flow of funds arrangements:



89. **Auditing Arrangements**: An independent external auditor, acceptable to the Bank, will be hired by the MoF to verify the accuracy of the transactions of the dedicated deposit account, including accuracy of exchange rate conversions; that the deposit dedicated account was used only for the purposes of the operation and no other amounts have been deposited into the

account. Also the auditor will have to obtain confirmation from corresponding bank(s) involved in the funds flow regarding the transaction. The time period for submission of the audit report to the Bank is no later than 6 months from when the loan proceeds are credited in the designated account.

D. Monitoring, Evaluation and Accountability

90. **The overall responsibility for monitoring implementation of the DPL program rests with the Ministry of Planning and International Cooperation (MoPIC)**. MoPIC will be responsible for coordinating, and reporting to the Bank on progress of implementing the DPL policy programs with the Government authorities responsible for the program implementation including the MoEMR, NEPCO, EMRC, MoWI and the Council of Ministers. Throughout implementation, the World Bank multi-sector team will undertake intensive supervision missions and provide technical assistance[36] and policy advice to support implementation and monitoring the DPL supported program. The proposed results indicators will be monitored to evaluate the impact of the DPL policy program in improving the financial and operational performance of the energy and water sector. Monitoring and evaluation of the results indicators will be based on data that will be available with the Government implementing authorities and verified by the Bank during implementation support.

91. **Grievance Redress**. Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation may submit complaints to the responsible country authorities, appropriate local/national grievance redress mechanisms, or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. SUMMARY OF RISKS AND MITIGATION

92. **The overall risk rating is assessed to be substantial.** Continued performance by the Government on its reform agenda in the energy and water sectors and the achievement of the proposed program's outcomes are subject to geopolitical and macroeconomic risks as well as financial sustainability risks related to the water and electricity sectors: More specifically:

a. **Political and Governance risk is substantial:** The volatility of the region and Jordan's high degree of integration with its neighbors remain a substantial risk to operations. The recent escalation of violence in neighboring countries with the rise of ISIS and Jordan's

[36] A new technical assistance financed by the Energy Sector Management Assistant Program (ESMAP) is mobilized to assist the Government of Jordan's reforms in the energy sector, by developing the capacity of the National Electric Power Company (NEPCO) in organization restructuring, procurement procedures, and fuel and power system planning.

direct involvement in the anti-ISIS coalition have compounded geopolitical and security risks to the country. Mitigation is stemming from actions taken by the Government at the national and international level to preserve Jordan's integrity/stability. The protracted nature of the conflict in Syria will likely continue to have significant repercussions on the country. These have been mitigated by grant support, particularly from GCC countries, to help Jordan mitigate the impact of Syrian refugee influx. The most significant risk is linked to political support for the proposed policy reforms, especially tariff reforms. So far, the Government has been able to mitigate these risks through reducing the impact of tariff reform on large groups of residential users by using the current electricity and water tariff structures that allow for cross-subsidies between different groups of consumers. In addition, while Parliament approval is not required for any policy measures under the DPL, the Government has however been able to mitigate Parliament's hesitation to support earlier tariff increases through wider and transparent discussions with the Parliament on the economic and fiscal impact of the tariff reforms. In addition, in its Vision 2025, the Government assigns an important role to improve awareness among water and energy consumers to use resources efficiently. During the DPL implementation, the World Bank would provide the Government with advisory support on best international experiences for developing communication strategy to help generate and sustain broader political and public support throughout the tariff reform process.

b. **Sector Strategy and Policies risk is substantial:**

- ***Energy.*** The major risk in the energy sector is linked to the fluctuation of oil price. In order to reduce the impact of increasing fuel cost on NEPCO's financial position and the subsequent fiscal burden, the Government has removed subsidies for fuel products (except LPG), and has been implementing an electricity tariff increase plan, according to which the electricity selling price to customers was increased by 15 percent twice. The recent sharp fall of oil price has positively revised the forecasts for full cost recovery in the electricity sector, and the decision for the 2015 electricity tariff increase has been to implement an increase of 7.5 percent instead of 15 percent. To mitigate this major risk, the Government is taking several measures to sustain the electricity subsidy reform program assessed. In addition, the Government is diversifying its energy sources to mitigate security of supply vulnerability and reduce electricity production costs to reduce the size of required electricity tariff increases.

- ***Water.*** The major water sector risks are associated with the political sensitivities linked to implementing water tariff increases, as the dismantling of energy subsidies will put upward pressure on the cost of water provision (due to the high energy intensity of water production in Jordan). Increases in water and wastewater tariffs, groundwater charges and irrigation fees are likely to have a positive impact on cost recovery while providing incentives to water conservation. To mitigate the risks associated with tariff increases the Government needs to continue communicating to the public and raising awareness about the sustainable provision of water focusing on the value of water and the need for water conservation. Although the reduction of water subsidies is politically sensitive, households are according to opinion polls more willing to consider reduction in water subsidies, possibly the result of previous awareness campaigns.

c) **Stakeholder risk is substantial**: The policy actions are made up of those actions aimed to improve the financial viability of the sector through increases in the electricity and water tariffs that will increase the cost of the service for consumers. The Government is however mitigating impact of electricity prices on the poor and vulnerable by limiting price increases to household consumption above 600 KWh. The water tariff restructuring in 2011 has also left the sector with a tariff structure that allows for the price impact to be mostly felt by residential users who use large quantities of water, or non-residential users. Nonetheless, during the implementation of the DPL series, the potential poverty impact of electricity and water tariff adjustments supported by the DPL will be closely monitored to consider, if needed, with the Government, mitigating any possible adverse impacts on the poor and vulnerable consumers if such impact arises. In that case, the recent progress to develop a National Unified Registry will enable the Government to set up a more targeted cash transfer program that could help if necessary to ease any effect of tariff increases on poor households.

Table 7: Risk Ratings

Risk Categories	**Rating**
1. Political and Governance	Substantial
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Substantial
4. Technical Design of Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Moderate
6. Fiduciary	Moderate
7. Environment and Social	Moderate
8. Stakeholders	Substantial
Overall	**Substantial**

ANNEX 1: POLICY AND RESULTS MATRIX

Prior Actions and Triggers		Results[37]
Prior Actions for Energy and Water Sectors Reform DPL 1	**Triggers for Energy and Water Sectors Reform DPL 2**	
Pillar A: Program Development Objective A Improving the Financial Viability of the Electricity and Water Sectors		
Prior Action #1: The Borrower's Council of Ministers has approved on February 22, 2015 the implementation of the annual electricity tariff adjustment planned for 2015 in accordance with the Borrower's 2013-2017 Electricity Tariff Adjustment Plan.	**Trigger #1**: The Council of Ministers approves implementing the annual electricity tariff adjustments planned for 2016 and 2017 to reach cost recovery[38] in accordance with the 2013-2017 Electricity Tariff Adjustment Plan	**Result Indicator A1**: Cost recovery[39] of the end user electricity tariffs ▪ **Baseline (2014)**: Cost recovery level 56 percent ▪ **Target (2017)**: Cost recovery level 100 percent
	Trigger #2: The Energy and Minerals Regulatory Commission (EMRC) approves new tariff regulations to sustain cost recovery while taking into consideration consumer affordability	
Prior Action #2: The Borrower's Council of Ministers has issued on July 14, 2015 a circular requesting the inter-ministerial debt committee to develop a debt management plan for the Borrower's national electric power company (NEPCO).	**Trigger #3**: The Council of Ministers approves and implements a multi-year Debt Management Plan for NEPCO.	**Result Indicator A2**: NEPCO's Debt management target achieved ▪ **Baseline (2014)**: NEPCO's debt servicing is managed through the budget, and there is no specific NEPCO Debt Management Plan in place ▪ **Target (2017)**: NEPCO's Debt Management Plan under implementation and 2017 debt reduction target[40] is achieved
Prior Action #3: The Borrower's Council of Ministers has approved on September 14, 2014, bylaws No. 93 for 2014 including tariff adjustments for production wells in accordance with the Borrower's "Structural Benchmark Government	**Trigger #4**: The Minister of Water and Irrigation approves the measures to increase sector revenues to enhance cost recovery[41] in accordance with the "Structural Benchmark Government Action Plan to Reduce Water Sector Losses" dated August 2013.	**Result Indicator A3**: Operation and Maintenance Cost recovery level in the water sector: ▪ **Baseline (2013)**: Cost recovery level 86 percent ▪ **Target (2017)**: Cost recovery level 100 percent

[37] 2017 targets in the matrix as achieved by end of 2017.
[38] Cost recovery in this case means financial cost recovery, which would include CAPEX, operational and maintenance as well as fuel costs, as measured by EMRC.
[39] Cost recovery in the electricity sector will be achieved by combination of electricity tariff adjustments and measures to reduce cost of fuel supply and generation under Pillar B.
[40] Annual debt reduction targets for NEPCO will be defined during the preparation of the second DPL
[41] Operation and Maintenance Cost recovery in this case means operational and maintenance cost recovery as measured by MoWI covering WAJ and Water Companies.

Prior Actions and Triggers		Results[37]
Prior Actions for Energy and Water Sectors Reform DPL 1	**Triggers for Energy and Water Sectors Reform DPL 2**	
Action Plan to Reduce Water Sector Losses" dated August 2013.		
Pillar B: Program Development Objective B Increasing Efficiency Gains in the Energy and Water Sectors		
Prior Action #4: NEPCO has assigned adequate number of staff and implemented a capacity building program for said assigned staff to manage LNG supply to power generation.	**Trigger #5**: NEPCO develops and implements fuel supply strategy to scale up share of gas supply for power generation.	**Result Indicator B1**: Share of gas supply for power generation ▪ **Baseline (2014)**: 7 percent of fossil fuel generation supplied by natural gas ▪ **Target (2017)**: 70 percent of fossil fuel generation supplied by natural gas **Result Indicator B2**: Share of MW renewable power in the generation mix. ▪ **Baseline (2014)**: Renewable power generation 0 percent of the generation mix ▪ **Target (2017)**: Renewable power generation 10 percent of the generation mix
Prior Action #5: The Borrower's Council of Ministers has approved on May 3, 2015, bylaws No. 50 for 2015 on renewable energy direct proposals.	**Trigger #6**: The Ministry of Energy and Mineral Resources issues required regulations for implementation of Direct Proposal-bylaws and establishes a Public Data Room for Renewable Energy Development to improve transparency.	
	Trigger #7: NEPCO implements in its Control and Dispatch Center operating procedures for integrating renewable power resources into the transmission grid according to the Control and Dispatch Center Operations Manual.	
Prior Action #6: The Borrower's Council of Ministers has approved on May 3, 2015 the Jordan renewable energy and energy efficiency fund (JREEF) bylaws No. 49 for 2015; the JREEF board of directors has approved the business plan for JREEF; and the Borrower has allocated financing to operationalize JREEF.	**Trigger #8**: At least two of JREEF's Financing Windows are operating with Window Managers in place and JREEF annual reports are issued.	
	Trigger #9: A multi-year Network Loss Reduction Program agreed upon between EMRC and the distribution companies is finalized with yearly loss reduction targets and is under implementation.	**Result Indicator B3**: Reduction in electricity distribution network losses: ▪ **Baseline (2014)**: The distribution sector has losses of 13.8 percent and lacks a multi-year loss reduction targets ▪ **Target (2017)**: Network Loss Reduction Program is under implementation and 2017 loss reduction target[42] is achieved

[42] Annual distribution network loss reduction targets will be defined during the preparation of the second DPL

Prior Actions and Triggers		Results[37]
Prior Actions for Energy and Water Sectors Reform DPL 1	**Triggers for Energy and Water Sectors Reform DPL 2**	
Prior Action #7: The Borrower's Council of Ministers has approved on June 2, 2015 an energy efficiency and renewable energy policy for the water sector.	**Trigger #10**: The Ministry of Water and Irrigation has a dedicated budget line provision sufficient to implement its planned energy efficiency activities as laid out in the energy efficiency and renewable energy policy for the water sector.	**Result Indicator B4:** Increase in energy efficiency savings in the water sector as per the implementation of the Action Plan accompanying the Energy Efficiency and Renewable Energy Policy: ▪ **Baseline (2013)**: Annual energy efficiency savings are 0 GWh ▪ **Target (2017)**: Annual energy efficiency savings are 50 GWh per year
Prior Action #8: The Borrower's Minister responsible for Water and Irrigation has approved a surface water utilization policy aimed at regulating surface water utilization in Jordan.	**Trigger #11**: The Minister of Water and Irrigation approves a Water Substitution policy **Trigger #12**: The Ministry of Water and Irrigation has a dedicated budget line provision sufficient to implement its planned actions to optimize its water resources as laid out in the surface water utilization and water substitution policies for the water sector.	**Result Indicator B5**: Water is more optimally allocated ▪ **Baseline (2013)**: 123 MCM of surface water used for municipal water use ▪ **Target (2017):** 128 MCM of surface water used for municipal water use. **Result Indicator B6**: Volume of treated wastewater used for non-domestic uses ▪ **Baseline (2013)**: 110 MCM of treated wastewater used for non-domestic uses ▪ **Target (2017)**: 135 MCM of treated wastewater used for non-domestic uses

ANNEX 2: LETTER OF DEVELOPMENT POLICY

MINISTRY OF PLANNING AND INTERNATIONAL COOPERATION

Ref. No. 5/9/1/6647

Date 22/07/2015

Dr. Jim Yong Kim
President of the World Bank Group
The World Bank
1818 H Street, N.W.
Washington, D.C. 20433
U.S.A

Subject: Letter of Development Policy for the First Programmatic Energy and Water Sector Reforms Development Policy Loan

Dear Dr. Kim,

Over the past few years, Jordan has suffered two successive external shocks of significant importance: the 2008 global financial crisis and the ensuing global recession and regional turbulences that started in early 2011 with the onset of the Arab Spring events. The impact of these shocks was exacerbated in Jordan by the disruption in critical natural gas supplies from Egypt and spillovers from the neighboring Syrian conflict, including hosting about 1.4 million Syrians in the Country. As a result, the Jordanian economy experienced wider fiscal deficits and loss of reserves in addition to persistent sluggish growth rates. Domestic revenues shrank from an average of 27 percent of GDP during 2000–2008 to about 24 percent of GDP in 2014. Government expenditures increased to 38 percent of GDP in 2014 to accommodate social demands through larger transfers and wage increases. This has resulted in an accumulation of a large net public debt, amounting about 81 percent of GDP as of end of December 2014, whose servicing exacerbates fiscal pressures. In particular, interruptions of Egyptian natural gas supply caused the National Electric Power Company (NEPCO) to run deficits equivalent to 4–5 percent of GDP per year since 2011 and accumulation of a total debt of about JD 4.7 billion by December 2014, the debt servicing of which has until recently been managed directly by the budget. Further budgetary losses equivalent to 1.2 percent of GDP were added in 2013 by the water sector. The water sector is not able to recover its operation and maintenance costs due to the increased dependence on high-cost *(and increasingly more energy-intensive)* technologies to make water available.

Consequently, the Government of Jordan has embarked on a major program aimed at strengthening its macroeconomic framework supported by a three-year International Monetary Fund (IMF) Stand-By-Arrangement (SBA) that started in August 2012 and will succefully conclude in August 2015. The IMF SBA supported a large fiscal consolidation program and a bold and progressive elimination in November 2012 of retail petroleum product subsidies, including reinstating a monthly automatic price adjustment mechanism to prevent recurrence of petroleum subsidy. Furthermore, a medium-term Electricity/Energy Strategy was announced in October 2013, of which electricity tariff increases and energy sources diversification are key elements. The first electricity tariff increases

THE HASHEMITE KINGDOM OF JORDAN - AMMAN
TEL. +962 6 4644466 FAX +962 6 4649341 P.O.BOX 555 AMMAN 11118 JORDAN E-MAIL: MOP@MOP.GOV.JO

occurred in August 2013, with subsequent increases every January until cost recovery at NEPCO is attained by end 2017. A new Liquified Natural Gas (LNG) terminal in Aqaba Port on the Red Sea started operation in early July 2015. The completion of renewable energy projects will further enable Jordan to reduce the cost of supply by reducing dependency on expensive fuels for power generation. The Government is also moving forward with the implementation of the Reinforcement of the Jordanian Electric Transmission Lines project (*Green Corridor*), including the construction of two new transmission lines, an electricity substation and the extension of two existing substations in order to integrate more renewable generation capacity and improve reliability of supply in Jordan to be implemented by NEPCO. In addition, the Government is implementing a Structural Benchmark Plan in the Water Sector, which aims to achieve operation and maintenance cost recovery in the water sector by 2017 through a combination of revenue increases and efficiency gains that will enable cost reductions.

The IMF SBA program has provided external financing, motivated structural reforms and addressed fiscal pressures caused by the energy and water sectors. As a result, the GDP growth rates increased from 2.7 percent in 2012 to 3.1 percent in 2014. However, because of the volatility and unpredictability of the regional crisis and the significant downside fiscal and development impact that the large influx of Syrian refugees is imposing on Jordan's economy, the Government believes it is critical to implement broader policy and structural reforms to sustain economic growth, despite the temporary relief arising from the fall of crude oil prices. In particular, expansion of medium-term reforms in the electricity and water sectors will be necessary for addressing public finance weaknesses and will help to structurally improve Jordan's macroeconomic framework. The reform programs in the energy and water sectors will be supported by the Programmatic Energy and Water Sectors Reform Development Policy Loan (DPL), for which the Government requested the World Bank support through an official letter dated 2 December 2014.

The Government's reform program supported by the DPL will be structured around two key policy areas: (a) improving the financial viability of the electricity and water sectors; and (b) increasing efficiency gains in the energy and water sectors. Key measures of the reform program focus on restoring the financial viability of sector utilities, in particular the National Electric Power Company (NEPCO); the backbone of the electricity sector, and on improving the operational performance of the energy and water sectors through efficiency gains. These policy areas are aligned with the Government's objectives and support achievement of the medium-term targets of the recently launched '*Jordan 2025: A National Vision and Strategy*', which seeks to achieve self-reliance and stability based on financial sustainability, enhanced productivity, increased competitiveness, and the gradual removal of indiscriminate subsidies. Reducing the fiscal burden of the electricity and water subsidies would also provide the Government with the fiscal space to invest in pro-poor programs and more inclusive and productive economic and social sectors to improve the standard of living of the population in Jordan.

The Government has already taken concrete steps towards implementation of the policy program supported under this Programmatic DPL, including implementation of the prior actions required for the presentation of the first DPL for approval by the World Bank's Board of Executive Directors, as follows.

1. **Improving the Financial Viability of the Electricity and Water Sectors**

Achieving Electricity Tariff Cost Recovery: The increased cost of electricity due to the sharp increase in imported fuel costs following the disruption of Egyptian natural gas supply to Jordan incurred significant financial losses for NEPCO. The Government is implementing its five-year tariff adjustment plan (2013–2017), and as a consequence of electricity tariff increases of up to 15 percent each in 2013 and 2014, NEPCO's revenues increased by US$670 million. **On 22 February 2015, the Cabinet of Ministers approved another tariff increase of up to 7.5 percent, implemented effective 16 February 2015 to 31 December 2015.** The Government is committed to continue implementation of future electricity tariff adjustments in 2016 and 2017 in accordance with the cost recovery objectives of its five year tariff adjustment plan. Furthermore, the Government supports efforts by the Energy and Minerals Regulatory Commission (EMRC) to develop and approve an adequate tariff pricing mechanism to improve the electricity tariff structure and sustain cost recovery in the electricity sector after 2017, to maintain the sector's financial viability and strengthen its resilience in coping with any future external fuel price shocks.

Resolving NEPCO's Debt: NEPCO's accumulated debt had increased to JD4.7 billion by December 2014. The Government's priority has been to focus on restoring the cost recovery of NEPCO by 2017 through a combination of tariff increases and fuel and generation diversification. While the Government has until recently provided guarantees for NEPCO's outstanding debt, the Government also acknowledges that the financial viability of NEPCO needs to be restored to enable the company to maintain its assets and invest in the expansion of its transmission network. Therefore, **on 14 July 2015 the Cabinet of Ministers issued a circular tasking the Inter-Ministerial Debt Committee with developing a multi-year Debt Management Plan for NEPCO**, which, when prepared, will be subsequently approved by the Cabinet of Ministers for implementation to ensure that the plan debt reduction targets for 2017 are achieved.

Enhancing Cost Recovery in the Water Sector: The water sector puts a significant burden on the budget due to the combination of the high cost of supplying water resulting from Jordan's extreme water scarcity and low revenues from the various water users, especially from agricultural and domestic water users who subsequently receive large water subsidies. The

increase in electricity prices *(to put NEPCO on a path of cost recovery)* and the large influx of Syrian refugees have increased the urgency to improve the financial viability of the water sector. The Government is implementing a Structural Benchmark Government Action Plan to reduce water losses that aims to improve revenues through a combination of water tariff increases, increases in connection charges, and improved billing and collection practices while simultaneously increasing the efficiency of supplying water. **The Cabinet of Ministers approved on 14 September 2014 implementation of a tariff increase for Production Wells from 100 fils per cubic meter to 250 fils per cubic meter.** The Government is committed to continue the implementation of future water tariff adjustments in 2015 and beyond in accordance with the Structural Benchmark Plan to improve cost recovery, to support the sector's financial viability and strengthen its resiliency in coping with any future external shocks.

2. Increasing Efficiency Gains in the Energy and Water Sectors

In parallel with tariff adjustments, the Government is implementing reform measures to increase efficiency gains both in the supply and demand for energy and water. These measures will improve the operational and financial performance of the energy and water sectors and lay the groundwork for the implementation of medium term efficiency gains to promote the long term sustainability of these sectors.

Diversification to Cleaner Fuel Supply for Power Generation and Scaling Up Development of Renewable Energy Resources and Energy Efficiency: The Government's program for the diversification of fuel supply sources and power generation aims to improve security of the electricity supply and reduce the cost of electricity generation and hence moderate the level of tariff increases required otherwise to reach cost recovery in the electricity sector. In particular, the Government has completed the development of an LNG terminal in Aqaba Port, which started operation in early July 2015. NEPCO will be responsible for the overall management and operation of the LNG terminal and has already signed LNG contracts of up to 250 million standard cubic feet per day. Natural gas supply to power generation will continue to present an economically and environmentally attractive option for Jordan, and the Government and NEPCO realize that the signed LNG supply contracts and envisaged LNG purchase from spot markets are the first step of a long-term fuel supply strategy to restore the share of natural gas supply to power generation to more than 70 percent in 2017. To meet the objective, **NEPCO is developing its institutional capacity and has established a team of 18 staff responsible for the planning and operations of LNG supply for power generation, and is undertaking a comprehensive training program for its staff on LNG market and supply**.

The Government also recognizes that the development of renewable energy is a key priority for diversification of its energy mix from domestic resources. The Renewable Energy and Energy Efficiency (REEE) Law was adopted in 2012, creating a regulatory and financial framework for renewable energy and energy efficiency and mandating the establishment of the Jordan Renewable Energy and Energy Efficiency Fund (JREEF). A comprehensive regulatory and pricing framework, including indicative pricing schemes for various renewable technologies, grid interconnection, and institutional development was established by the Government, which has enabled the development of a renewable power market and projects in Jordan. To that end, the Ministry of Energy and Mineral Resources has been developing new renewable energy projects and is on track to ensure that renewable energy makes up 10 percent of the power generation mix in 2017. NEPCO is also strengthening its institutional capacity in renewable energy operations and will implement, in its Control and Dispatch Center, operating procedures for integrating the new renewable power resources into the transmission grid. **The Government of Jordan also continues to improve the renewable energy regulatory framework and has approved new bylaws for developing renewable energy by direct proposals on 3 May 2015.** The Ministry of Energy and Mineral Resources will follow up with issuing new regulations, required by the bylaws, to streamline the investment procedures for direct proposals and will establish a Public Data Room for Renewable Energy Development to improve transparency and increase investors and public confidence in future renewable energy development in Jordan.

Furthermore, the Ministry of Energy and Mineral Resources established the JREEF. The establishment of the JREEF is aimed to raise awareness of potential energy savings among industry, commercial, and household consumers; provide technical and financial support to overcome existing investment barriers; and promote private investments for energy efficiency and renewable energy projects. **The Cabinet of Ministers approved the bylaws for the JREEF on 3 May 2015.** These bylaws were developed through consultation with energy sector stakeholders and are designed to build the credibility of the JREEF by ensuring the effective and transparent management of the fund. To operationalize the JREEF, **its Board of Directors approved on 15 February 2015 the Business Plan for the JREEF operation in 2015 and put in place staff, including the JREEF executive director, project manager, and communication manager.** The JREEF is also in the process of setting up financial windows to provide financial support to targeted energy efficiency projects currently under consideration by the JREEF.

Development of Electricity Distribution Networks Loss Reduction Program: The Government's program to improve overall operational efficiency in the electricity sector includes reducing losses in the distribution networks. To that end, the EMRC and the distribution companies are jointly preparing a study that aims to develop accurate baselines and targets for reducing technical and commercial losses in the distribution networks, identify areas in the networks with high losses, and recommend improvement measures to reduce network losses. The study is planned to be

completed in late 2015 and would provide the technical basis for updating and implementing the Distribution Network Loss Reduction Program, with specific loss reduction targets agreed upon between the EMRC and the Electricity Distribution Companies.

Scaling Up of Energy Efficiency and Renewable Energy in the Water Sector: The dismantling of electricity subsidies will have a significant impact on the financial viability of the water sector. Due to its water-scarce environment and with water resources being located at considerable distance from population agglomerations, water needs to increasingly be distributed and often pumped over large distances and lifted to overcome altitude differences. As a result, about 14 percent of the electricity consumption in the country is currently in the water sector, making the sector the largest user of electricity in the country. Hence, the Government recognizes that more efficient electricity consumption is essential to improve the operational and financial performance of the water sector. **To generate energy savings in the water sector, the Cabinet of Ministers approved on 2 June 2015 an Energy Efficiency and Renewable Energy Policy for the water sector, prepared by the Ministry of Water and Irrigation**. As part of the policy, the Ministry developed an action plan, which will be implemented over the next few years to ensure that the sector will be able to ensure energy savings.

Optimizing Allocation of Water Resources: The per capita available renewable water resources are dropping steadily in the country due to population growth. In 2013, the surface water annual yield was about 362 million cubic meter, which is about 40 percent of the total water annual yield. As a result, the country still depends disproportionally on groundwater resources, causing that resource to be over-exploited. The Government is developing policies to achieve a more efficient use of the existing surface water resources and increase reliance on treated wastewater. The Government is also implementing measures to use fresh water for the activities that generates the highest value and aims to reduce the volume of fresh water to the agricultural sector in the long run by increasingly substituting fresh water for treated wastewater to supply farmers and industry. At the same time, the Government seeks to increase the cost of groundwater as a tool to reduce over-pumping. This process was initiated with the increase of groundwater tariffs according to the Structural Benchmark Plan. As a first step in this process of optimizing its water resources allocation, **the Minister of Water and Irrigation has approved a Surface Water Utilization policy on 8 July 2015**, which aims, among others, to use surface water resources more efficiently through a set of measures to increase water harvesting, land use measures, and improvements in storm water management.

In conclusion, we would like to express again our strong commitment to the energy and water sectors reform programs outlined in this letter and whose execution in the difficult regional context will require significant mobilization of resources from our development partners, including the World

MINISTRY OF PLANNING AND INTERNATIONAL COOPERATION

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Bank. For this purpose, the Government of Jordan requests the World Bank's support for our program, as a critical partner in the implementation of Jordan's development agenda.

We, therefore, look forward to our continued collaboration in developing the energy and water sectors in Jordan.

Please accept my high esteem and consideration.

Sincerely,

Imad Najib Fakhoury
Minister of Planning and International Cooperation

cc\ Dr. Merza Hasan, Executive Director, Fax: + 1 (202) 477 3537
\ International Cooperation Dept. – World Bank and UN Agencies Division - H.B

THE HASHEMITE KINGDOM OF JORDAN - AMMAN
TEL. +962 6 4644466 FAX +962 6 4649341 P.O.BOX 555 AMMAN 11118 JORDAN E-MAIL: MOP@MOP.GOV.JO

ANNEX 3: FUND RELATIONS NOTE

IMF Executive Board Completes Seventh and Final Review Under the SBA for Jordan and Approves US$396.3 Million Disbursement

Press Release No. 15/366
July 31, 2015

The Executive Board of the International Monetary Fund (IMF) today completed the seventh and final review of Jordan's economic program supported by a Stand-By Arrangement (SBA). The completion of the final review enables the disbursement of SDR 284.1 million (about US$396.3 million). The three-year SBA in the amount of SDR 1.364 billion (about US$2 billion) was approved by the Executive Board on August 3, 2012 (See Press Release No. 12/288).

Following the Executive Board's decision, Mr, Mitsuhiro Furusawa, Deputy Managing Director and Acting Chair, issued the following statement:

"Jordan's Fund-supported program has helped the country to successfully weather severe external shocks, including the conflicts in Syria and Iraq. Gradual fiscal consolidation, aided by lower oil prices, ensured that public debt is expected to start stabilizing this year and, together with a prudent monetary policy, has preserved macroeconomic stability and supported confidence.

"Although growth has slowed down in the first quarter of this year, the current account deficit is narrowing, foreign reserves remain at an adequate level, and inflation is low. Policies are on track to meet their 2015 targets. Fiscal structural reform is moving forward, financial policies are appropriately focused on further enhancing the resilience of the sector, and progress is also being made toward fostering private sector development.

"Significant challenges remain. Though major efforts have already been made, continued public sector adjustment is needed to put the high public debt firmly on a downward path, including through steadfast implementation of the energy strategy. With the 2015 budget well on track, the focus should be on identifying early the measures that will underlie the necessary 2016 budget adjustment.

"There is also a need to move on structural reforms geared to job creation, and focused on labor market reform as well as improvements in the business climate and the quality of public institutions. Vision 2025—a 10-year framework for economic and social policies—is an opportunity to address these challenges, and an important step will be to anchor it in a medium-term macro-fiscal framework.

"Close Fund engagement with Jordan will continue, including through Post-Program Monitoring."