PROGRAM INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

September 6, 2016
Report No.: 108172

Operation Name	Second Programmatic Energy and Water Sector Reforms DPL
Region	MIDDLE EAST AND NORTH AFRICA
Country	Jordan
Sector	General energy sector (65%); General water, sanitation and flood protection sector (35%)
Operation ID	P160236
Lending Instrument	Development Policy Financing
Borrower(s)	Ministry of Finance
Implementing Agency	Ministry of Planning and International Cooperation
Date PID Prepared	September 6, 2016
Estimated Date of Appraisal	September 25, 2016
Estimated Date of Board Approval	December 1, 2016
Corporate Review Decision	Following the corporate review, the decision was taken to proceed with the preparation of the operation
Other Decision	{Optional} – If applicable following corporate review

I. Country and Sector Background

1. The proposed operation in the amount of US$ 250 million - the second in a programmatic series of two Development Policy Operations - aims to support of fiscal and policy reform programs undertaken by the Government of Jordan (the Government) in the energy and water sectors. This operation will ensure the continued implementation of the energy and water sector reforms planned under the programmatic DPL to help Jordan achieve sector sustainability and financial viability over the medium term. The operation is fully aligned with Jordan's 2025 Vision which calls for achieving self-reliance and financial stability by enhancing financial sustainability and productivity across various economic. The operation's policy program also supports key objectives of the Bank FY2017-2022 Country Partnership Framework for Jordan that focuses on improving the management of the water and energy sectors as key strategic sectors for promoting improved service delivery, economic growth, fiscal discipline and private sector development, contributing to the World Bank Group twin goals of reducing poverty and promoting shared prosperity in a sustainable manner.

2. Jordan's economy slowed down in 2015 for the first time since 2010, mainly due to the effects of security spillovers, requiring the Government to embark on a new program of fiscal consolidation and economic growth. Jordan grappled with addressing a number of exogenous shocks after the global financial crisis, notably the interruption of gas supply from Egypt and the massive influx of Syrian refugees that resulted in an average annual growth rate of 2.7 percent. However, despite a steady pick-up since 2010 to 3.1 percent in 2014 and better performance by NEPCO in 2015, a number of regional spillover risks, manifested in 2015 dragging down growth to 2.4 percent in 2015 and further widening Jordan's output gap. Consequently, the Government requested – after using the IMF's Standby

Arrangement - the use of an IMF's Extended Fund Facility[1] (EFF) for the 2016-2019 period. The IMF EFF program will, amongst others, support policies for electricity tariff sustainability in line with the policy program supported by the Bank programmatic Development Policy Loan (DPL) and support measures to manage the debt of NEPCO and the Water Authority of Jordan (WAJ). It is critical for Jordan to continue implementing its broader energy and water policy and structural reforms included under the programmatic DPL to sustain fiscal stability and economic growth.

3. The implementation of the overall reforms in the energy sector has been strong and needs to be sustained over the coming years. Substantial reforms supported by the programmatic DPL have been implemented by the Government and are already showing positive results as reflected in an improved financial and operational performance of the electricity sector. The electricity tariff of the *National Electricity Power Company* (NEPCO) reached cost recovery levels in late 2015 level due to increases in NEPCO's revenues (as a result of three tariff adjustments implemented by EMRC between 2013 and 2015) and a reduction in the cost of electricity. The cost reduction is the result of the sharp decline in oil prices combined with the successful operation of the liquefied natural gas (LNG) terminal in Aqaba and the recent commissioning of several new renewable energy plants replacing the reliance on more expensive and polluting diesel and heavy fuel oil[2] in power. However, remaining challenges include the sustained implementation of energy diversification policies and the sustainability of the electricity tariff cost recovery due to the country's vulnerability to oil price fluctuations and the management of NEPCO's debt of more than JD5.2 billion.

4. Implementation of the reforms in the water sector has been on track against an increasingly challenging environment in which the sector is operating. Jordan one of the most water-scarce countries, with low annual precipitation, dependent on transboundary surface water and groundwater. Jordan has faced a steep increase in water demand in recent years as a result of rapid population growth (the Syrian refugee influx led to an increase in demand by 21 percent throughout the country, and a 40 percent increase in demand in the northern governorates), income growth and urbanization. In the longer run, Jordan faces major challenges. Aridity and water scarcity render Jordan environmentally sensitive to climate change. Water availability in this scenario is likely to continue to decrease. The Government has made progress in increasing water tariffs and implementing measures to improve the operational efficiency and revenue collection in the water sector in accordance with the Government Water Structural Benchmark Plan which aims to achieve operation and maintenance cost recovery in the water sector by 2021.

II. Operation Objectives

5. The objective of the proposed operation is to improve the financial viability and increase efficiency gains in the energy and water sectors in Jordan. Experience from energy and water sector reform processes has shown that improving operational efficiency in parallel with increasing sector revenues is essential to achieve financial sustainability in the sectors. The proposed operation is built on the two pillars of the programmatic DPL focusing on: (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 ensure sustained implementation of the Government program in the water sector to increase water tariffs and increase collection efficiencies to improve operations and maintenance cost recovery.

[1] This EFF follows the successful completion in August 2015 of the International Monetary Fund's (IMF's) Stand-by-Arrangement (SBA) which supported a fiscal consolidation program that helped stabilizing and improving confidence in Jordan's macroeconomic framework during 2012-2015.

[2] The reliance on more expensive and polluting diesel and heavy fuel oil in power generation was caused by the interruption of Egypt gas supply to Jordan in 2011 and beyond.

The second pillar will support policies aimed at sustaining Jordan's fuel and power generation diversification and institute new regulations for increasing transparency in renewable energy development. The strategy will also strengthen NEPCO's institutional capacity to integrate the large share of renewable energy under development into the grid. In the water sector, the DPL will support a more optimal utilization of water resources in the country including scaling up energy efficiency in the water sector as important measure to reduce the cost of water in Jordan.

III. Rationale for Bank Involvement

6. 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 substance of the proposed operation remains consistent with the program design presented under the First Programmatic Development Policy Loan (DPL) and its prior actions link directly to the indicative triggers established under the first operation. The Government has made significant progress in implementing the DPL supported reform program. Policies supported by the proposed DPL will contribute to the twin goals of reducing poverty and promoting shared prosperity. 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.

IV. Tentative Financing

Source:		($m.)
Borrower		0.00
International Bank for Reconstruction and Development		250.00
Borrower/Recipient		
Others		
	Total	250.00

V. Institutional and Implementation Arrangements

7. The Ministry of Planning and International Cooperation (MoPIC) will be responsible for the overall implementation of the program supported by this proposed operation. MoPIC will be responsible for the coordination, and reporting to the Bank, on progress of implementing the Development Policy Loan program with the Government authorities responsible for the program's implementation, including the Ministry of Energy and Mineral Resources, the National Electric Power Company, the Energy and Minerals Regulatory Commission, and the Ministry of Water and Irrigation. Throughout implementation, the World Bank multi-sector team will undertake intensive supervision missions, and provide technical assistance and policy advice, where needed, to support the implementation, monitoring and evaluation of the DPL supported program.

VI. Risks and Risk Mitigation

8. **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 as follows:

a. **Macroeconomic risk is substantial**. The balance of risks to growth is downward. Jordan will need to continue managing repercussions from the regional situation (including the challenges of the Syrian refugee influx). Persistently low oil prices are a risk for Jordan in the short and the medium term, as Jordan benefits from the GCC for remittances, exports, foreign direct investment and grants which constitute large sources of foreign exchange. Fiscal adjustment measures to contain the fiscal deficit and high debt-to-GDP ratio are likely to be difficult to implement given the population's sensitivity to fiscal adjustment measures already taken. A rebound in global oil prices would negatively affect fiscal consolidation efforts (unless remedial reforms, such as an automatic electricity tariff adjustment mechanism, are implemented). Furthermore, the willingness and speed of reform implementation, particularly to improve the business climate, will be crucial to attract the investment Jordan aspires for, while the country remains vulnerable to uncertain grant inflows.

b. **Sector Strategy and Policies risk is substantial**. So far, the Government has been able to mitigate the sector strategy risks through reducing the impact of tariff reform on large groups of residential users by using cross-subsidies. In its Vision 2025, the government assigns an important role to improve awareness among water and energy consumers to use these resources more efficiently. In the energy sector, a major risk is linked to the fluctuation of oil price. The Government's success in diversifying its energy sources will further mitigate supply vulnerability and reduce electricity production costs, and will over time further reduce the size of required electricity tariff increases. In the water sector, a major risk factor is linked to the sharp increase in the debt of WAJ. Although the reduction of water subsidies is politically sensitive, households are according to opinion polls more willing to consider a reduction in water subsidies, possibly the result of previous awareness campaigns. The IMF's Extended Financing Facility focus on extending the average maturity of public debt, in combination with the AfD's studies on WAJ debt will reduce the risk associated with the WAJ debt, whereas the IMF's EFF also includes an update of the Structural Benchmark Plan, which may result in additional revenue enhancing measures. During the DPL implementation, the World Bank would provide the Government with advisory support on best international experiences for developing and implementing a communication strategy to help generate and sustain broader political and public support throughout the reform process.

c. **Geopolitical and Regional risk is high:** 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 the Syria conflict, the rise of the Islamic State, ongoing violence in Iraq, escalating tensions between the region's major powers and in the Israeli-Palestinian conflict are all compounding the risks to Jordan in terms of potential destabilizing impact and toll on the economy. 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, and more recently the Jordan Compact) and the trade deal with the European Union. Only such an approach would help mobilize investments at levels commensurate with the scale of the challenges. This strategy explicitly recognizes the upside risk of a turn of events in Syria could have significant growth potential for. If the situation improves in the near term Jordan could serve as a launching pad for Syria's eventual reconstruction.

VII. Poverty and Social Impacts and Environment Aspects

Poverty and Social Impacts

9. The implementation of the policy actions in this DPL are expected to have modest poverty and social impacts on residential consumers. The programs and the DPL policies are supposed to help to

improve the efficiency of the energy and water sector services to their customers by reducing their real cost. These policies will also enable significant energy efficiency and renewable energy investments that would reduce air pollution (and hence reduce its impact on public health), and minimize the effect of over-exploitation of groundwater withdrawals. As 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 which would benefit the poor[3].

10. The Government is mitigating the impact of electricity prices on the poor and vulnerable by limiting price increases through extensive use of cross-subsidies. Preliminary results show that the direct welfare impact on residential consumers, including the poor and vulnerable, is very small because of the limit on price increases in the lower electricity consumption blocks, whose tariff increases have been around zero. The indirect welfare losses[4] related to the increase in electricity tariffs in the industrial and commercial sectors are, however, estimated at about 1.2 percent of household expenditures (as higher tariffs in these sectors will be mostly passed through to customers). The indirect welfare impacts are more or less uniform across consumption quintiles.

11. 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, and through the use of cross-subsidies. The action plan includes tariff increases not only for residential and non-residential water and wastewater users, but also for agricultural and industrial groundwater users through a combination of changes in tariffs and fee structures. Policy simulations of the estimated increase in residential water tariffs found that the impact of the direct real tariff increases on household welfare, approximated by the change in household expenditures, is estimated to be equivalent to 0.34 percent of the household expenditure for the bottom quintile declining to 0.29 percent for the top quintile. The indirect welfare losses related to the increase in water tariffs are more or less uniform across consumption quintiles, while the combined impacts of the water tariff increases on household welfare are very small.

Environmental Impacts

12. The implementation of the policy actions supported by the proposed DPL is not likely to have a significant impact on the environment, forests, and natural resources. Many of the prior actions will benefit the environment. The tariff reform process supported under Pillar I is likely to help curb the demand for water and energy resulting in less environmental degradation, including a reduction in the overexploitation rates of ground water. The efficiency gains program under Pillar II promoting energy efficiency, the growth of renewable energy, and more extensive use of gas in power generation (as opposed to heavy fuels and diesel) will reduce carbon emissions. The optimization of surface water use may also result in a more sustainable use of scarce water resources, and adoption of the water substitution and re-use policy will increase the use of treated wastewater. In parallel with this policy, current treated wastewater specifications and standards are currently being amended and are expected to match WHO provisions for environmental and health safety standards of reuse in the areas where there are current gaps.

13. In Jordan, environmental policies and regulation are in place. Project development should comply with the country's environmental and social impact assessment requirements. Over the last fifteen years, the Government has made significant strides in mainstreaming environmental sustainability in projects,

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

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

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.

VIII. Contact point

World Bank
Contact: Caroline van den Berg
Title: Lead Water Economist
Tel: (202) 473-8121
Email: cvandenberg@worldbank.org
Location: Washington D.C., USA

Contact: Mikul Bhatia
Title: Senior Energy Economist
Tel: (202) 473-0957
Email: mbhatia@worldbank.org
Location: Washington D.C., USA

Borrower
Contact: H.E. Dr. Saleh Kharabsheh
Title: Secretary General, Ministry of Planning and International Cooperation
Email: saleh.kh@mop.gov.jo

IX. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop