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Report No. 100233-PK

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROGRAM DOCUMENT

ON A PROPOSED CREDIT

IN THE AMOUNT OF SDR 356.2 MILLION

(US\$500 MILLION EQUIVALENT)

TO THE

ISLAMIC REPUBLIC OF PAKISTAN

FOR A

SECOND POWER SECTOR REFORM DEVELOPMENT POLICY CREDIT

October 15, 2015

Energy and Extractives Global Practice  
South Asia Region

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## PAKISTAN - GOVERNMENT FISCAL YEAR

July 1 – June 30

### CURRENCY EQUIVALENTS

(Exchange Rate Effective as of September 30, 2015)

Currency Unit = Pakistan Rupee (PKR)

US\$1.00 = PKR 104.475

SDR 1.00 = US \$1.40374

### ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
BISP	Benazir Income Support Program
bps	Basis Points (hundredths of one percent)
CFAA	Country Financial Accountability Assessment
CPPA (G)	Central Power Purchasing Agency (Guarantee) Limited
CPS	Country Partnership Strategy
CSF	Coalition Support Fund
DPC	Development Policy Credit
DPC1	First Power Sector Reform Development Policy Credit
Disco	Distribution Company (WAPDA successor company)
ECC	Economic Coordination Committee (of the Pakistan Cabinet)
EFF	Extended Fund Facility (of IMF)
FBR	Federal Board of Revenue
FDI	Foreign Direct Investment
FGD	Flue Gas Desulfurization
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
Genco	Generation Company (WAPDA successor company)
GHG	Greenhouse Gas
GSP	Generalized System of Preferences
GTAP-E	Global Trade Analysis Project Computable General Equilibrium Energy Substitution Model
GWh	Gigawatt Hour
HFO	Heavy Fuel Oil
Hydel	Hydroelectric
IDA	International Development Association
IFC	International Finance Corporation
IMF	International Monetary Fund
IPP	Independent Power Producer
JICA	Japan International Cooperation Agency
KESC	Karachi Electric Supply Company Limited (now K-Electric)
kWh	Kilowatt Hour
LDP	Letter of Development Policy
MOF	Ministry of Finance
MPNR	Ministry of Petroleum and Natural Resources

MW	Megawatt
MWP	Ministry of Water and Power
MTB	Market Treasury Bill
MYT	Multiyear Tariff
NDA	Net Domestic Assets
NDT	NEPRA-determined Tariff
NEPRA	National Electric Power Regulatory Authority
NFA	Net Foreign Assets
NIR	Net International Reserves
NPL	Non Performing Loan
NTDC	National Transmission and Despatch Company
OGRA	Oil and Gas Regulatory Authority
PDF	Pakistan Development Fund
PEFA	Public Expenditure and Financial Accountability
PFM	Public Financial Management
PMT	Proxy Means Test
PSIA	Poverty and Social Impact Assessment
REER	Real Effective Exchange Rate
SBP	State Bank of Pakistan
SDR	Special Drawing Rights
SME	Small and Medium Enterprise
SOE	State Owned Enterprise
USAID	United States Agency for International Development
WAPDA	Water and Power Development Authority
WAPDA Hydrel	Water and Power Development Authority Hydroelectric

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**ISLAMIC REPUBLIC OF PAKISTAN**  
**SECOND POWER SECTOR REFORM DEVELOPMENT POLICY CREDIT**

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**SUMMARY OF PROPOSED PROGRAM AND CREDIT**  
**ISLAMIC REPUBLIC OF PAKISTAN**  
**SECOND POWER SECTOR REFORM DEVELOPMENT POLICY CREDIT**

Borrower	Islamic Republic of Pakistan.
Implementation Agency	Ministry of Finance.
Financing Data	Amount: SDR 356.2 million (US\$500 million equivalent). Terms: IDA Credit of 25 years maturity including five years grace period, with an interest rate of 1.25 percent, a service charge of 0.75 percent and a commitment fee of not more than 0.5 percent.
Operation Type	Single-tranche, the second in a proposed programmatic series of two.
Pillars of the Operation And Program Development Objective(s)	This development policy credit (DPC) focuses on structural reforms to the electric power sector that will improve its financial, technical and commercial performance. The DPC is structured around three objectives: (A) Reducing subsidies and improving tariff policy; (B) Improving sector performance and opening the market to private participation; (C) Ensuring accountability and transparency.
Result Indicators	The following results indicators are selected for the project: (i) Reduced subsidies allocated in the federal budget from a baseline of 1.8 percent of GDP in FY12/13 to 0.8 percent by the end of FY14/15; (ii) Increased bill collection in Discos from a baseline of 86 percent of bills collected in FY12/13 to 90 percent of bills collected in FY15/16; (iii) Increased domestic gas supply from 3.8 billion standard cubic feet per day in FY12/13 to 5 billion standard cubic feet per day in FY15/16; (iv) Separation of market operation and transmission system operation, with contracted power generated by IPPs, Gencos and WAPDA Hydel traded through an independent Central Power Purchasing Agency acting on behalf of Discos by the end of FY 15/16; (v) Disco performance reports and NEPRA review published by FY14/15.
Overall risk rating	High
Climate and disaster risks	Are there short and long term climate and disaster risks relevant to the operation (as identified as part of the SORT environmental and social risk rating)? Yes: No: X
Operation ID	P152021

## DATA SHEET

### PROGRAM DOCUMENT

<p>Date: October 14, 2015</p> <p>Country: Islamic Republic of Pakistan</p> <p>Operation: Power Sector Reform: Second Development Policy Credit</p> <p>Operation ID: P152021</p> <p>Team Leader: Richard Jeremy Spencer</p> <p>Practice Manager/Director: Julia Bucknall</p> <p>Country Director: Patchamuthu Illangovan</p>	<p>Lending Instrument: Development Policy Lending</p> <p>Board Approval Date: November 12, 2015</p> <p>Effectiveness Date: November 19, 2015</p> <p>Closing Date: December 31, 2016</p> <p>Environmental screening category:</p>
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Special Development Policy Lending:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Crisis or Post-Conflict Situation (exception to OP8.60):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Programmatic:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Deferred Drawdown Option:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Subnational Lending:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Operation Financing Data
<input type="checkbox"/> IBRD Loan <input checked="" type="checkbox"/> IDA Credit <input type="checkbox"/> Grant <input type="checkbox"/> Other:
Total Bank financing (US\$m.): 500
Proposed terms:

Tranche Release Information
List binding conditions as stated in the <b>Legal Agreement</b> .

Tranche 1	Description	Amount	Expected release date
	The actions to be taken by the Recipient under the Program include the following	500	12/02/2015
Condition 1	Following the mechanism in 2014 Tariff and Subsidy Policy Guidelines, MWP has informed NEPRA of the FY14/15 subsidies by consumer category to incorporate in the tariff determination of each Disco, to apply in FY14/15 expected to result in electricity subsidies to be reduced to 0.8% of GDP.		
Condition 2	MWP has published in its website a cap for total overdue payables to power generators not to exceed PKR 314 billion and a plan to reduce the flow of new overdue payables to 39 billion by FY17/18, with interim targets for the flows of PKR 92 billion in FY15/16 and PKR 57 billion in FY16/17.		

Condition 3	The Government has implemented a mechanism based on tariff surcharges and Tariff Rationalization Fund to maintain national uniform tariffs in Discos while ensuring cost recovery.
Condition 4	MPNR has signed supplemental agreements agreeing revised prices for 92 exploration concessions and production leases at the levels set out in the 2012 Petroleum Policy, including 26 with the private sector.
Condition 5	The Economic Coordination Committee of the Cabinet has approved policy directives that LNG will be provided to consumers who pay its full cost through the tariff.
Condition 6	(i) CPPA (G) has demonstrated operational capability to handle all steps in the billing and settlement cycle of electricity sales by Generators and purchases by Discos; and (ii) NEPRA has granted an amendment to NTDC license to eliminate CPPA functions.
Condition 7	CPPA (G) publicly disclosed on its website the monthly amounts due, and payments made, by each Disco to CPPA (G), and by CPPA (G) to Generators, including arrears.
Condition 8	NEPRA has disclosed the annual Discos' performance and evaluation report, and has initiated outreach action to consumers on the content thereof; and Discos have disclosed on their respective websites their annual performance reports, including their plans to improve service delivery.

<b>Triggers</b>	
There are no triggers as this is the second operation in a series of two.	

Does the operation depart from the CAS in content or other significant respects?	[ ] Yes [X] No
Does the operation require any exceptions from Bank policies?	[ ] Yes [X] No
Have these been approved by Bank management?	[ ] Yes [X] No
Is approval for any policy exception sought from the Board?	[ ] Yes [X] No

<p>Operation development objective</p> <p>This development policy credit (DPC) focuses on structural reforms to the electric power sector that will improve its financial, technical and commercial performance. The DPC is structured around three objectives:</p> <p>(A) Reducing subsidies and improving tariff policy;</p> <p>(B) Improving sector performance and opening the market to private participation;</p> <p>(C) Ensuring accountability and transparency.</p>
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<b>Practice Area/Cross Cutting Solution Area</b>
Practice Area: Energy & Extractives
Cross Cutting Areas:

<b>Sectors / Climate Change</b>				
Sector (Maximum 5 and total % must equal 100)				
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Energy and mining	General energy sector	100		
<input checked="" type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this				

<b>Themes</b>		
Theme (Maximum 5 and total % must equal 100)		
Major Theme	Theme	%
Financial and private sector development	Regulation and competition policy	45
Public sector governance	Other public sector governance	22
Public sector governance	e-Government	11
Economic management	Debt management and fiscal sustainability	11
Financial and private sector development	Other Private Sector Development	11

**IDA PROGRAM DOCUMENT FOR A PROPOSED  
SECOND POWER SECTOR REFORM DEVELOPMENT POLICY CREDIT  
TO THE ISLAMIC REPUBLIC OF PAKISTAN**

**1. INTRODUCTION AND COUNTRY CONTEXT**

1. **This proposed second credit in a programmatic series of two single tranche operations continues IDA's support for Pakistan's goal of developing an efficient and consumer-oriented electric power system that meets the needs of its people and economy sustainably and affordably.** The proposed operation supports the government's efforts to make much-needed structural changes to the electric power sector that will improve its financial, technical and commercial performance. IDA financing would provide SDR 356.2 million (US\$500 million equivalent). The proposed operation is part of a wide program of reforms aimed at lifting Pakistan's growth potential.

2. **Pakistan's economic performance is improving.** Real GDP growth was 4.2 percent in fiscal year 2014-2015 (FY14/15), despite natural disasters and a difficult political and security situation, and is expected to rise further next year. The threat of a balance of payments crisis, severe a year ago, has receded. Foreign exchange reserves had risen to over 3 months of imports by about mid-year and have remained above that level since. The fiscal deficit was 5.3 percent of GDP in FY14/15. Inflation was 4.5 percent at the end of the year, helped by lower energy prices. The IMF program is on track, having completed the eighth review at the end of September 2015. The outlook is for moderately higher growth, nevertheless, the economy is still vulnerable to shortages of energy, natural disasters and to lower than expected inflows of remittances, foreign direct investment (FDI) and taxes.

3. **Poverty and human development remain a concern.** The share of the population below the national poverty line fell from 34.7 percent in FY01/02 to an estimated 13.6 percent in FY10/11. Many live near the poverty line. Growth appears to be pro-poor as real per capita consumption growth of the bottom 40 percent of the population exceeded that of the top 60 percent in the same period. The national Gini coefficient fell from 0.34 to 0.29 between FY98/99 and FY10/11. Social safety nets such as the Benazir Income Support Program (BISP) have redistributed wealth to the poor and vulnerable and have become especially important as growth has become more volatile. Despite these gains, Pakistan's human development indicators continue to be low.

4. **Energy sector performance has improved but challenges remain.** Subsidies to the sector were reduced in FY14/15 to about 0.8 percent of GDP, down from 1.5 percent in FY12/13. Falling oil prices have reduced input costs for electricity generation enabling tariffs to be adjusted downwards. In FY14/15 a gap between costs and revenues including subsidies of about PKR 2.7/kWh remained, however, and the sector continues to suffer acute liquidity shortages. As a result, accumulated arrears of payment by the public electricity distribution companies (Discos) to their suppliers, commonly known as the circular debt, reached an estimated PKR 314 billion, at the end of FY14/15 or a little over one percent of that year's GDP. Targeting of subsidies towards the poorest remains an issue, as does the need to ensure that the sector develops in a socially and environmentally sustainable way.

5. **The proposed operation focuses on structural reforms that are aimed at restoring the viability of the electric power sector.** Distractions on the political and security front slowed the pace of reform in the latter part of 2014, but momentum has again picked up. The government has developed an ambitious power sector privatization program, the achievement of

which will require further structural reforms to develop a competitive market and improve transparency. In turn sector performance will improve, particularly from reduced losses, raised collections, lower cost of supply and further investment. The Extended Fund Facility (EFF) agreed with the IMF early in the government's term, and complementary support by a group of donors has underpinned the authorities' resolve and capacity to deliver. The operation is expected to support faster economic growth, focus government subsidies on the poor and help set the sector onto a more environmentally sustainable path.

6. **The proposed operation supports the World Bank's twin goals of poverty reduction and shared prosperity.** The Country Partnership Strategy (CPS) for 2015-2019 recognizes the importance of energy by devoting one pillar exclusively to it. A better-performing sector benefits all consumers at all levels of the economy and the shortages of energy are widely recognized to have held back Pakistan's economic performance. Increased supply at competitive prices supports economic growth for all enterprises that use electricity, regardless of size or sector and is especially important given Pakistan's dependence on manufacturing and services. A sector which requires less subsidy and has fewer contingent liabilities creates fiscal space for more poverty-targeted interventions.

7. **The operation faces high risks.** Past efforts at reform of the power sector have stalled in the face of vested interests and government indifference. The current government has done well so far, but there remains a risk of slowing down or reversal of reforms, especially if public fatigue or resentment sets in should shortages persist. Resistance to change within the sector, especially if it increases individual accountability in companies and among consumers who benefit from the current weak governance, presents a major risk of reversal and thus to the operation's objectives. These risks are mitigated by the government's bold agenda, based on its clear electoral mandate backed by a solid IMF program and close donor coordination, which has built momentum and support for the reforms. The government is building confidence and capacity and resources to handle macroeconomic and management challenges.

## 2. MACROECONOMIC POLICY FRAMEWORK

### 2.1 Recent economic developments

8. **Economic conditions have improved over the past year.** The risk of a balance of payments crisis has receded with a significant increase in international reserves resulting from strong remittances, foreign capital inflows and the windfall from lower oil prices. The current account deficit remained manageable; the foreign exchange market has been stable. Headline inflation declined to 4.5 percent in FY14/15. The fiscal deficit was contained at around 5.3 percent of GDP in FY14/15 due to high non-tax revenues, and restricted expenditures. The adverse political and security events and floods of the first semester of FY14/15 were offset by the positive effects of the decline in oil prices.

9. **Growth has maintained its upward momentum, but remains below required levels to accelerate job creation and improve living standards.** According to official estimates, GDP registered growth of 4.2 percent in FY14/15 as opposed to 4.0 percent last year, driven mainly by services and supported by agriculture despite weaker than expected manufacturing performance. The service sector was boosted by finance and insurance, and general government services, allowing services to attain an aggregate growth of 5.0 percent. Growth was better than last year in wheat, cotton, and rice crops despite the September 2014 floods in Punjab and the agriculture sector grew by 2.9 percent. Growth of large-scale manufacturing was significantly

below last year – 2.4 percent in FY14/15 against growth of 4.0 percent in FY13/14 – as energy constraints and weak external demand continue to pose challenges for this sector.

10. **There is less risk of a balance of payments crisis.** Official foreign exchange reserves reached US\$13.6 billion on June 30, 2015, equivalent to 3.3 months of next year’s imports, and well above the low of US\$3.0 billion in November 2013. The current account deficit remained modest, at around 0.8 percent of GDP during FY14/15. This outcome was supported by record high workers’ remittances of US\$18.5 billion, a sustained decline in international commodity prices including oil, and improved inflows in services account against Coalition Support Fund (CSF). In addition, higher inflow in the capital and financial account was supported by receipts from the issuance of US\$1.0 billion international Sukuk.

11. **The Real Effective Exchange Rate (REER) in FY14/15 appreciated year on year by 8.8 percent.** This may be affecting competitiveness of exports, which contracted by 3.7 percent compared with import contraction of 1.3 percent in FY14/15. The decline in export growth was driven by traditional textile products, petroleum products, jewelry, leather products, engineering goods, furniture, cement and guar products. The contraction in imports was primarily due to a reduced oil import bill which declined by 17.8 percent (US\$2.6 billion) during FY14/15 compared with FY13/14.

12. **Fiscal consolidation has continued, but important challenges remain.** During FY14/15, the fiscal deficit (excluding grants) declined from 5.6 percent to 5.3 percent of GDP: revenue declined marginally by 0.1 percent of GDP and expenditures decreased by 0.4 percent of GDP. Spending on subsidies fell from 1.3 to 1.0 percent of GDP. The provinces this time around did not contribute to fiscal consolidation efforts of the federal government and posted a small combined deficit of 0.04 percent of GDP. Provisional data point to a collection of 9.5 percent of GDP on account of FBR revenues, which are lower than the target by 0.2 percent of GDP in FY14/15 due to the decline in oil prices, historical low inflation, sluggish large scale manufacturing sector activity as well as non-implementation of some budget revenue measures. Weak revenue performance compelled the government to rein in expenditure in order to reduce the fiscal deficit and as a result, development expenditure were curtailed by 0.5 percent of GDP.

13. **Public debt sustainability is starting to improve.** The public debt to GDP ratio decreased to 64.6 percent in FY14/15, but it remains above the 60 percent limit stipulated in the Fiscal Responsibility and Debt Limitation Act (FRDLA) 2005.<sup>1</sup> Although more expensive, domestic debt dominates the debt composition at 69 percent of the total. Government has been successful in efforts to move to longer maturities. Recent Sukuk issuance and lending from multilaterals have allowed the government to reduce its short term borrowing needs from the central bank.

14. **Private sector credit growth has slowed.** Increased budgetary borrowings crowded out the private sector which only increased its borrowing from the commercial banking system by 5.6 percent in FY14/15, lower than the growth witnessed last year.

15. **Prices have stabilized due to fiscal consolidation and low oil prices.** For a third year in a row, headline CPI inflation is in single digits. In June 2015 it was 3.2 percent, although core inflation stood at 4.6 percent. Year-on-year, food inflation declined to 3.2 percent. Falling oil

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<sup>1</sup> The FRDLA allows a departure from the threshold provided the Finance Minister specifies the reasons and the measures government intends to take to return below the threshold over an estimated period of time [Section 3 (4) of the FRDLA 2005].



prices have not only contributed directly through reductions in petroleum product prices and electricity tariffs but also indirectly through reduced service and manufacturing costs.

16. **Financial sector developments are also supporting recovery.** To foster private sector credit, the State Bank of Pakistan (SBP) cut its key policy rate by a cumulative 300 basis points (bps) in FY14/15, owing to favorable trends in oil prices and falling inflation. To anchor inflation expectations and improve liquidity management, the central bank also announced a time-bound plan to set the policy rate between the floor and ceiling rates of the interest rate corridor in a forward looking fashion, thus maintaining real interest rates positive and in line with future reserves accumulation and a stable inflation path. The banking sector has maintained improved performance and solvency. Year on year banking profitability improved, growing by 51 percent up to June 2015. Non-performing loans (NPLs) declined to 12.4 percent of the overall loan portfolio in June 2015 and by virtue of adequate provisioning, net NPLs were 2.7 percent. The improvement in credit quality is broad based, as NPLs in small and medium enterprises decreased slightly last year (to 32.2 percent) and NPLs in the consumer sector decreased also slightly to 10.6 percent.

17. **Country risk perception is improving.** Pakistan's Emerging Market Bonds Index Plus (EMBI+) risk spread has declined from its peak in March 2013 of 1,011 bps to 461 bps in April 2015. Moody's changed the outlook for its Caa1 sovereign credit rating from stable to positive in March 2015. In May 2015, Standard & Poor's ratings agency raised Pakistan's credit rating from stable to positive but affirmed its B- rating. Market confidence allowed Pakistan to raise US\$2 billion in May 2014 through two dollar-denominated Eurobonds with bullet maturities and coupons of five years and 7.25 percent and ten years and 8.25 percent, implying a spread of about 460-560 basis points over US Treasuries. The government issued a US\$1 billion five-year international Sukuk in November 2014 at 6.75 percent. In September 2015, Pakistan issued a \$500 million, 10-year Eurobond at 8.25 percent, the same coupon as the May 2014 issue.

## **2.2. Macroeconomic Outlook**

18. **The outlook for FY14/15 to FY18/19 is for moderately higher economic growth.** As the stabilization of the economy is preserved and the country builds a comfortable cushion in its external reserve position, this assumes steady progress in implementing the key pillars of the Government's medium term program, which preserves the growth momentum. Each of those pillars tackles key constraints to growth: electricity load shedding, poor service delivery by inefficient and fiscal losses-prone State Owned-Enterprises (SOEs), a non-competitive trade regime, a cumbersome business environment, low access to finance, and poor revenue mobilization that constrains fiscal space. The outlook also assumes that the windfall gains of low oil prices reduce gradually over the next 2-3 years and that political and security risks are well-managed.

19. **Growth will be driven by a mix of consumption recovery on the demand side and by productivity gains in the services and large-scale manufacturing sectors on the supply side.** Demand side drivers are expected to be low oil prices, strong but declining remittances, reinvigorated private investment, some export growth and, to a lesser extent, public investment. The supply side drivers are expected to be productivity gains in the services and large-scale manufacturing sectors, which should benefit from decreased power load-shedding and improvements in the business climate and public sector enterprises. Stable or declining international commodity prices are expected to help reduce inflationary pressures, lower interest rates and favor consumption. Aided by a gradually improving security situation, structural reforms are expected to spearhead productivity growth, reduce the country risk, promote foreign

and domestic investment linked to the sale or restructuring of state-owned enterprises (SOE) and foster competition in the banking, telecom and commercial service sectors.

20. **Fiscal consolidation and a positive external balance should improve financing conditions for the private sector.** Fiscal consolidation is expected to reduce government's borrowing needs and create some fiscal space for public investment while reducing public debt. Scheduled banks' liquidity is in turn expected to increase. As a result, crowding out of private sector credit should decline, favoring private investment. Successful fiscal consolidation, gradual rebuilding of the external position and lowering of the country risk, are expected to facilitate external financing and enable the business environment to stimulate private financial inflows. The baseline macro projections are shown in Table 1 and explained below.<sup>2</sup>

**Table 1: Key Macroeconomic Indicators Pakistan FY11/12 to FY19/20**

	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	
	/12	/13	/14	/15	/16	/17	/18	/19	/20	
	Actual				Projections					
<b>Real economy</b>	(Percentage change; unless otherwise indicated)									
Nominal GDP at market prices (in bn. of rupees)	20,047	22,489	25,402	27,384	30,348	33,764	36,602	40,336	44,450	
Real GDP growth (at factor cost)	3.8	3.7	4.1	4.2	4.5	4.8	5.2	5.2	5.2	
Contributions:										
<i>Agriculture</i>	0.8	0.6	0.5	0.6						
<i>Industry</i>	0.5	0.3	1.2	0.7						
<i>Services</i>	2.5	2.8	2.5	2.9						
Per Capita GDP (current US\$) 6/	1,252	1,275	1,334	..						
Unemployment rate 1/	6.0	6.2	6.0	..						
Consumer prices (period average)	11.0	7.4	8.6	4.5	5.0	6.0	5.0	5.0	5.0	
Consumer prices (eop)	11.3	5.9	8.2	3.2						
<b>Fiscal sector</b>	(In percent of GDP; unless otherwise indicated)									
Expenditures	21.6	21.4	19.8	19.7	19.4	19.7	19.6	20.1	20.1	
Revenue	12.8	13.1	14.3	14.4	15.3	16.0	16.6	17.3	17.6	
Overall balance (excl. grants)	-8.8	-8.3	-5.5	-5.3	-4.1	-3.7	-3.0	-2.8	-2.5	
Total public debt	64.5	64.9	64.9	64.6	62.9	60.2	59.5	59.3	59.0	
Foreign currency public debt 2/	26.0	22.1	21.1	19.9						
Domestic currency public debt	38.5	42.8	43.8	44.8						
<b>Monetary Sector</b>	(Percentage change; unless otherwise indicated)									
Broad Money	14.1	15.9	12.5	13.2						
Credit to non-government	7.5	-0.6	11.1	5.6						
Interest (key policy interest rate)	12.0	9.0	10.0	6.5						
<b>Balance of payments</b>	(In percent of GDP; unless otherwise indicated)									
Current account balance (incl. transfers)	-2.1	-1.1	-1.3	-0.8	-0.8	-1.0	-0.7	-0.9	-1.0	
Exports of goods & services	13.2	13.6	12.5	11.1	10.1	9.4	9.8	9.2	9.9	
Imports of goods & services	21.7	21.0	20.4	18.3	17.1	16.5	17.0	16.2	17.1	
Capital and financial account	0.7	0.4	3.0	1.8	1.2	1.3	0.8	0.4	0.9	
Foreign direct investment, net	0.3	0.5	0.6	0.2	0.3	0.5	0.4	0.4	0.5	
Gross official reserves (in US\$ million, eop) 3/	10,852	6,047	9,171	13,545	17,131	19,462	19,645	17,681	17,022	
Gross official reserves (in months of next year's imports of G&S) 4/	2.7	1.5	2.2	3.2	3.9	4.3	4.1	3.5	3.1	
Total external debt 5/	29.1	26.2	26.6	24.1	22.9	22.2	23.3	21.3	22.1	
Rupees per U.S. dollar (period average)	89.2	96.8	102.9	101.5						
<u>Memo:</u>										
Nominal GDP at market prices (in US\$ billion)	224.6	231.1	243.6	269.9						
GDP, PPP (current international \$) 6/	791.0	838.1	896.4	..						

<sup>2</sup> All data, tables and figures contained in this section are based on information available up to April 30, 2015.

1/ National estimates.

2/ Includes medium and long term PPG debt as well as short-term external debt and IMF debt (budget and balance of payments support), foreign currency bonds (NHA/NC) as well as PSEs' non-guaranteed debt.

3/ SBP Gross Reserves exclude Cash Reserve Requirement, gold and foreign currency deposits of commercial banks held with SBP.

4/ In months of next year's imports of goods and services.

5/ Total external debt is inclusive of medium and long term PPG debt as well as short-term external debt, IMF and private debt.

5/ Source: WDI (as of September 23, 2015).

- **Growth and inflation:** GDP growth is expected to reach 4.5 percent in FY15/16 and pick up to around 5.2 percent in FY17/18 and onwards. Services are projected to expand, especially telecom, fostered by new 3G/4G broadband services, electricity and transport. Manufacturing is expected to benefit from improved energy supply and better private sector credit conditions. Consumption will be supported by remittances, albeit with declining growth rates. Private investment is expected to benefit from better business conditions and increased public investment. Manufactured goods and services exports are expected to grow at an average of around 3 percent and remain constrained owing to tempered demand from China and Europe. Inflation is expected to settle at 5 percent from FY17/18 onwards owing to continued fiscal prudence and an improved global economic outlook.

**Table 2: Key Fiscal Indicators Pakistan FY12/13 to FY19/20**

	FY12 /13	FY13 /14	FY14 /15	FY15 /16	FY16 /17	FY17 /18	FY18 /19	FY19 /20
Percent of GDP	Actual			Projections				
<b>Revenue and grants</b>	<b>13.2</b>	<b>15.3</b>	<b>14.6</b>	<b>15.4</b>	<b>16.2</b>	<b>16.7</b>	<b>17.4</b>	<b>17.6</b>
Total Revenue	13.2	14.5	14.4	15.3	16.0	16.6	17.3	17.6
Tax revenue	10.0	10.5	11.0	12.1	12.9	13.6	14.4	14.8
Taxes on goods and services	4.3	4.6	4.6					
Direct Taxes	3.3	3.5	3.8					
Taxes on international trade	1.1	1.0	1.1					
Other taxes	1.3	1.5	1.6					
Nontax revenue	3.2	3.9	3.3	3.2	3.1	3.0	2.9	2.8
Grants	0.1	0.8	0.2	0.1	0.2	0.1	0.1	0.0
<b>Expenditure</b>	<b>21.5</b>	<b>20.1</b>	<b>19.7</b>	<b>19.4</b>	<b>19.7</b>	<b>19.6</b>	<b>20.1</b>	<b>20.1</b>
Current expenditure	16.4	15.4	16.1	15.1	15.7	15.4	15.6	15.4
Interest payments	4.4	4.6	4.8					
Superannuation allowances & pension	0.8	0.7	0.7					
Transfers (other than provinces)	1.0	1.1	1.1					
Others	5.2	4.3	4.6					
Provincial	4.9	4.7	5.1					
Development expenditure & net lending	5.1	4.9	4.2	4.3	4.0	4.2	4.5	4.7
<b>Statistical discrepancy</b>	<b>0.1</b>	<b>-0.2</b>	<b>-0.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Overall balance (excluding grants)</b>	<b>-8.3</b>	<b>-5.6</b>	<b>-5.3</b>	<b>-4.1</b>	<b>-3.7</b>	<b>-3.0</b>	<b>-2.8</b>	<b>-2.5</b>
<b>Overall balance (including grants)</b>	<b>-8.3</b>	<b>-4.8</b>	<b>-5.1</b>	<b>-4.0</b>	<b>-3.5</b>	<b>-2.9</b>	<b>-2.7</b>	<b>-2.5</b>
<b>Financing</b>	<b>8.3</b>	<b>5.6</b>	<b>5.3</b>					
External	0.1	1.3	0.5					
Of which : privatization receipts	0.0	0.0	0.0					
Domestic	8.2	3.5	4.6					
<b>Memo:</b>								
Primary balance (excluding grants)	-3.9	-1.0	-0.6					
Primary balance (including grants)	-3.9	-0.2	-0.4	0.4	0.4	1.5	1.7	1.6

Source: World Bank Staff calculations and estimates

- **Fiscal accounts:** The consolidated fiscal deficit (excluding grants) is projected to almost halve from 5.3 percent of GDP in FY14/15 to 2.8 percent of GDP by 2018/19 and beyond as shown in Table 2. Increased tax revenue, curtailed federal government expenditure and provincial surpluses will be the main contributors. The tax strategy adopted by the Government, including the elimination of discretionary tax concessions, aims at an increase in tax revenue from 10 percent of GDP in FY12/13 to 14.8 percent in FY19/20. About two thirds is envisaged to come from the federal level and one-third from provinces. The

government's privatization program and improved governance and efficiency of SOEs will reduce demand for government grants. Tariff adjustments and reduced technical and non-technical losses will lessen electricity subsidies and thus recurrent expenditure is expected to decline from 16.1 percent of GDP in FY14/15 to 15.4 percent of GDP in FY19/20. Part of the fiscal space created would allow increased development spending, from 4.2 percent of GDP in FY14/15 to 4.7 percent of GDP in FY19/20.

- *Revenue mobilization:* Federal and provincial tax collections are projected to improve from 10.3 percent and 0.8 percent respectively in FY14/15 to 12.4 percent and 1.2 percent by FY17/18. Revenue mobilization will be helped by tax buoyancy resulting from the steady acceleration of growth, higher imports and reforms to tax policy and administration. The government's strategy to broaden the tax base and reduce the tax gap is focused on five areas: (i) minimization of tax expenditure under a three-year program phasing out SROs; (ii) upward revision of sales tax and general excise tax rates; (iii) upward revision of the capital gains tax on securities and immovable property; (iv) renewed procedures and thresholds for income and sales tax registration; and (v) identification of tax evaders in commercial and professional services sectors. The first stage of removal of SRO-supported concessionary tax exemptions is estimated to have increased revenues by around 0.35 percent of GDP, as part of existing measures accounting for 0.7 percent of GDP in FY14/15. The total estimated additional revenue expected from phasing out SROs over three years is about one percent of GDP. Nontax revenues are assumed to fall from 3.3 percent of GDP in FY14/15 to 2.8 percent of GDP in FY19/20, the result of reduced US Coalition Support Funds.
- *External Sector.* The current account deficit is expected to increase to 1.0 percent in FY16/17—slightly up from 0.8 percent of GDP in FY14/15. Faster growth will require higher imports of raw materials and fuels. Strong remittances will continue to partly finance a modest but growing current account deficit in the medium term. Slightly higher foreign investment inflows under the China Pakistan Economic Corridor, investments attracted by a gradually lower country risk and initial privatizations will support the financial account, despite declining multilateral financial net inflows. Official foreign exchange reserves are projected to be at 3.9 months of import coverage by end FY15/16 and reach a plateau of 4 months in FY17/18. Balance of Payment financing requirements are shown in Table 3.

**Table 3: Pakistan BOP Financing Requirements and Sources FY12/13 to FY16/17**

In million US Dollars	Actual			Projections	
	FY12/13	FY13/14	FY14/15	FY15/16	FY16/17
Financing requirements	<b>7,934</b>	<b>9,069</b>	<b>6,512</b>	<b>6,777</b>	<b>7,722</b>
Current account deficit	2,496	3,130	2,221	2,513	3,095
Maturing short-term debt	391	..	582	1,000	1,000
Amortization of medium- and long-term debt	5,047	5,939	3,709	3,264	3,627
Financing sources	<b>7,932</b>	<b>9,069</b>	<b>6,512</b>	<b>6,777</b>	<b>7,722</b>
FDI and portfolio investments (net)	1,284	4,301	2,537	1,680	1,448
Capital grants	250	350	358	202	480
Other net capital and financial inflows	-1,067	1,199	1,067	-97	-220
Short term debt disbursements	256	732	1,155	1,385	1,500
Long term debt disbursements	2,683	5,772	5,981	4,838	5,168
Change in reserves (decrease = +)	4,530	-3,285	-4,586	-1,231	-654

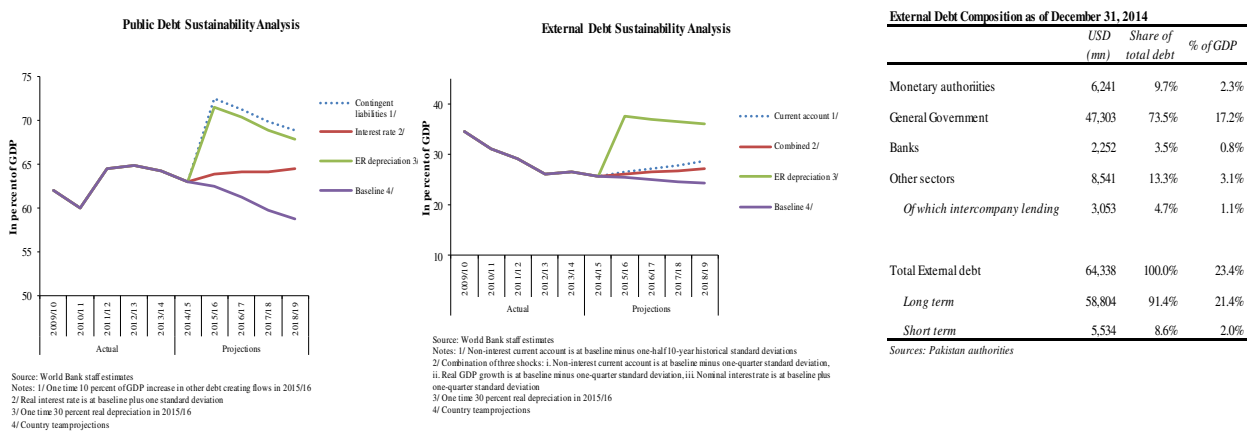
Source: World Bank Staff calculations and estimates

- *Financing Gap.* Gross financing requirements from the balance of payments are expected to be about US\$7.7 billion by end-FY16/17 and their mix is expected to change. IMF and

official creditors' amortization is projected to decline by almost US\$2.3 billion between FY13/14 and FY16/17. In contrast, the current account deficit is projected to maintain the level in absolute terms by FY16/17. Multilateral, bilateral and private debt-creating flows coupled with disbursements under the EFF and DPCs are expected to be the main financing sources. In FY15/16 the government plans to issue Eurobonds to the tune of US\$1 billion.

- **Public Debt.** Pakistan's public debt to GDP ratio is projected to decline in FY15/16 to 62.9 percent and cross below the threshold of 60 percent by FY17/18. A debt sustainability analysis shows that the debt path is sensitive to exchange rate depreciation shocks and, to a lesser extent, the materialization of contingent liabilities, either from power sector arrears or SOE losses. The debt sustainability analysis is shown in Figure 1 and discussed further in Annex 4.

**Figure 1: Pakistan Debt Sustainability Analysis FY09/10 to FY 18/19**



21. **The macroeconomic framework is adequate for the proposed operation.** Economic activity is picking up, inflation is declining, and the fiscal deficit is narrowing. Previous external imbalances are declining, the current account deficit remains modest and a minimum cushion in foreign exchange reserves has been successfully rebuilt.

22. **There are significant downside risks to the projected outlook, although these are partially balanced by upside risks from the decline in oil prices.** Pakistan remains vulnerable to domestic and external shocks. *Domestically*, the country is exposed to natural disasters, political events and terrorism. Challenging domestic political conditions as those suffered during the first half of FY14/15 may disrupt economic activity. Security risks related to events in Afghanistan may also disrupt economic activity, discourage investment and undermine fiscal consolidation. Slippages in the privatization program may lead FDI not to materialize as expected. A persistent dollar appreciation with limited exchange rate flexibility may erode export competitiveness. Delays in much-needed structural reforms may put the IMF program off track, weaken growth prospects and discourage private investment. *Externally*, the economy is dependent on remittances. Weak oil prices may lead to low remittances growth from labor-recipient oil-rich countries. Protracted global economic weakness, especially in the Euro area, China and Japan, could negatively affect exports and remittances.

23. **The mitigation response would depend on the nature of the shock.** Under any circumstance, the Government has an interest to keep a solid macroeconomic record, a large reserve cushion, healthy fiscal accounts that reduce borrowing needs, an appropriate monetary policy stance and a strong safety net that protects the vulnerable. Efforts to reduce fiscal deficits

have resulted in a slight decline in debt levels in the past few years, which is projected to continue going forward.

### **2.3. Relations with the IMF**

24. **The IMF EFF Program is on track.** Pakistan entered into a 36-month EFF with IMF in September 2013 for an amount of SDR 4,393 million. So far Pakistan has undergone seven successful quarterly program reviews with IMF and has received an amount of \$ 4.26 billion from IMF under EFF in seven quarterly installments. The eighth review was approved by the IMF Executive Board on September 28, 2015 with another tranche of SDR 360 million (about US\$505 million) made available.

## **3. THE GOVERNMENT'S PROGRAM**

### **3.1. Key Issues in the Power Sector**

25. **Pakistan's power sector is in crisis in energy as well as financial terms.** Despite significant improvements, the sector's performance is far from satisfactory and several problems remain unresolved. Total installed generation capacity was about 24,400 MW in FY13/14, but only about 16,700 MW was available at peak hours, leading to a peak shortfall of 5,400 MW. The sector has managed to improve supply, with an average daily shortage in FY14/15 of 2,900 MW compared with 3,800 MW in FY13/14 and 4,000 MW in FY12/13. Summertime load shedding was reportedly reduced to six hours per day for most urban areas and eight hours in rural areas, though other reports indicate that more extensive loadshedding also occurs. Tariff increases and outages during summer have been one of the drivers of public unrest which resulted in protests in August 2014 and in July 2015. In FY14/15, federal government subsidies to the sector amounted to two and a half times federal expenditure on the health and education sectors combined.

26. **Attempts at power sector reform started early.** In the early 1990s Pakistan was one of the first countries to initiate a comprehensive program of energy sector reform. The vision was to unbundle the Power Wing of the Water and Power Development Authority (WAPDA) into commercially oriented and efficiently managed and operated companies. Separate corporate entities were created from WAPDA with responsibilities for: thermal generation through four Gencos; hydropower through WAPDA Hydel; transmission through the National Transmission and Despatch Company (NTDC); and distribution through nine Discos (now ten). The new sector structure foresaw a market operator under which all electricity generated would be purchased on behalf of the Discos by a Central Power Purchasing Agency (CPPA). An independent CPPA would also have a responsibility to develop competition in the market. Privately-financed generation by independent power producers (IPPs) was introduced in parallel, with some success; about one half of all electricity generated today is from IPPs. The Karachi Electricity Supply Company (KESC, now K-Electric) remained a separate utility which was later privatized. An independent economic regulator, the National Electric Power Regulatory Authority (NEPRA), was established by law.

27. **Poor follow up of reforms has resulted in weak institutions and operations.** Despite the solid foundations, implementation has been patchy. Vested interests within the former WAPDA companies have created a considerable obstacle to further reform and in particular to privatization. The CPPA remained a department of NTDC, although this was originally intended to be an interim measure. Neither the Gencos nor WAPDA Hydel had relevant contracts with CPPA and CPPA in turn did not have relevant agreements with any of the Discos

to buy electricity on their behalf. Consequently, individual companies' accountabilities to each other or their owners are not recognized or enforced and some costs that might otherwise be recoverable from consumers cannot be recognized by the regulator while consumers may also be meeting costs which they should not. The government, and Ministry of Water and Power (MWP) in particular, recognizes the poor sector performance and the weak institutional setting are a drain on its limited resources, a drag on the economy and an obstacle to privatization.

28. **The sector is unable to recover its costs from the current combination of tariffs and subsidies.** Past governments have been reluctant to stand behind pricing that ensures full cost recovery. As the owner of the Discos, government has not been able to find the right combination of incentives and management to ensure good performance across the board. Costs which cannot be recovered from consumers or covered by subsidies accumulate on the books of the Discos, which in turn fail to pay fully for goods and services received, especially electricity, giving rise to the circular debt. The government is liable for these debts which it pays down sporadically, most recently upon assuming office, thus providing a further subsidy to the sector. Because receipts do not yet meet costs, the circular debt has re-emerged and is at the root of a liquidity crisis that causes up to 5,000 MW of capacity to lie idle.

29. **The cost of electricity generation is unnecessarily high.** Poor planning and implementation of strategy combined with failure to address the concerns of stakeholders have stalled much hydropower development, the lowest cost source of generation in the country. Incentives for exploration and production of domestic gas have been weak and the government has been slow to implement the Petroleum Policy approved in 2012 which would increase prices. Capture in the gas market has resulted in administrative allocation of gas to inefficient segments including fertilizer production and compressed natural gas for transport at distorted prices. The result is that there is insufficient gas even to meet the needs of the existing generation fleet. Tensions with neighboring countries have hampered the development of international energy trade. The result is an avoidable reliance on expensive imported heavy fuel oil for about 37 percent of generation which even at current depressed prices accounts for about 70 percent of the total energy cost.

30. **Service quality is variable.** Aging and overloaded transmission and distribution systems suffer technical losses and are unreliable, leading to frequent unscheduled outages which exacerbate the load shedding that is the result of shortages of electricity. There is little that Discos can do to alter the amount of power they are allocated, or the outages that result from transmission system breakdowns, both of which limit the quality of service they provide in their territories. Some Discos achieve levels of losses and collections comparable with the best distribution companies in Asia, while others are among the worst, suggesting that much is within management control, although exogenous factors including lawlessness also play a role.

### **3.2. The Government's Policy and Program for the Electric Power Sector**

31. **Pakistan's goal is to develop an efficient and consumer oriented electric power system that meets the needs of its people and economy sustainably and affordably.** The three guiding principles of the 2013 National Power Policy are efficiency, competition and sustainability, and it focuses on the five targets set out in Table 4.

**Table 4: The Five Targets of the National Power Policy (July 2013)**

Target	Current Situation	Goal and date
Decrease gap between supply and demand	4,500 – 5,000 MW shortfall	Reduce to zero by 2017
Improve affordability by decreasing cost of generation	Average generation cost 12 US¢/kWh	Reduce average generation cost to 10 US¢/kWh by 2017
Decrease aggregate technical and commercial transmission and distribution (T&D) losses	T&D losses currently about 23-25 percent	Reduce T&D losses to about 16 percent by 2017
Improve collection of billed electricity	Collections are currently about 85 percent of billing	Increase collections to 95 percent of billing
Improve governance by decreasing decision making times at Ministries, related departments and regulators	Slow decision making	Shorter processing times (goal yet to be established)

32. **The government has developed an action plan to implement the National Power Policy over the next three to five years.** The action plan ties together the policies and actions required to implement the 2013 National Power Policy. The strategies are closely interlinked. Achieving financial sustainability requires improving cash flows through tariffs reflective of efficient costs, promoting efficiency and performance of the companies through commercialization, and reducing losses, in particular theft. The government considers that privatization of the Discos will help improve performance. Reductions in the cost of generation will come from increasing hydropower and gas in the generation mix and higher efficiency of new plant, promoted through least cost planning. Subsidies must increasingly be targeted only to low-income households. Creating awareness and consensus for the policy implementation requires increasing transparency through greater access to information, strengthening the capacity of NEPRA and improving its accountability.

#### 4. THE PROPOSED OPERATION

##### 4.1. Link to Government Program and Operation Description

33. **The proposed operation continues support for the government’s Action Plan to implement the 2013 National Power Policy.** The first operation reflected prior actions taken by the government to support the most pressing needs to stabilize the sector. This second operation in the series has a bias towards longer term structural reform. Combined, the series will improve the financial, technical and commercial viability of the electric power sector and reduce the burden of public financing for it. It is centered around three policy aims:

- (A) *Reducing subsidies and improving tariff policy.* It is essential to reduce subsidies, make them more transparent and target them better if the sector is to become financially viable and the government’s fiscal position is to improve. Measures in this area will further limit government subsidies, including through the new Universal Service Obligation Fund to shift the cost of the uniform tariff policy on to consumers and start active management of the circular debt.
- (B) *Improving sector performance and opening the market to private participation.* Actions to be supported will increase the supply of gas through better and more transparent pricing, and move the electricity sector towards market oriented commercial operation, thus opening it up for privatization.
- (C) *Ensuring accountability and transparency.* Better monitoring, governance, transparency and rigor in reporting of results in the energy sector are important for implementation of reform and to ensure government and broader stakeholder support. Actions include



monitoring and self-reporting mechanisms for sector entities, and publication of performance against benchmarks.

34. **There are synergies between the three policy aims, shared prosperity and poverty reduction.** Addressing subsidies and ensuring that the efficient costs of providing electricity services are reflected in tariffs will provide strong signals to Discos and their owners that they must improve performance. Increasing the supply of gas and opening the sector to private participation will reduce the subsidy burden. More transparency and accountability will improve governance and give more information to potential investors in the privatization process, while also promoting demand for an efficient and well run sector, helping to reduce subsidies. A better-performing sector benefits all consumers at all levels of the economy by removing a constraint to Pakistan's better economic performance. Increased supply at competitive prices supports economic growth for all enterprises that use electricity, regardless of size or sector and is especially important given Pakistan's dependence on manufacturing and services. A sector which requires less subsidy and has fewer contingent liabilities creates fiscal space for more poverty-targeted interventions.

35. **The operation draws on previous experience in energy policy lending in Pakistan and elsewhere.** Three lessons are particularly relevant:

- In Pakistan, complex or politically difficult sector reforms are best supported through dedicated sector operations. A multi-sector operation can play only a secondary or facilitating role when dealing with deep-rooted reluctance to reform as prevails in the power sector.
- Energy sector reform programs require sustained intervention over the long term but must be designed flexibly to allow assessment of progress and adaptation as the reform evolves, including leaving open the option to change indicative triggers or bring other instruments into play.
- Structural change must be complemented by behavior change among those who are affected, and they need space and time to recognize and adopt new ways of working; the Bank must calibrate its support so that it matches the pace of change government is able to accommodate. Technical assistance and investment financing can support and complement these changes.

36. **This second operation builds on the achievements of the first.** In some areas, the actions of the government have been stronger than originally expected, whilst in others, a different approach has been required. The prior actions, while still supporting the original three pillars have been adjusted where necessary, following the principle of flexibility. The policy matrix attached at Annex 1 also includes a table showing the indicative triggers originally proposed for this second operation, the modified prior actions and the rationale for the change. The prior actions are also discussed in the following paragraphs.

## 4.2 Prior Actions, Results and Analytical Underpinnings

### *Policy Area A: Reducing subsidies and improving tariff policy*

**DPC2 Prior Action 1:** *Following the mechanism in 2014 Tariff and Subsidy Policy Guidelines, MWP has informed NEPRA of the FY14/15 subsidies by consumer category to incorporate in the tariff determination of each Disco, to apply in FY14/15 expected to result in electricity subsidies to be reduced to 0.8% of GDP.*

37. **Continued efforts are needed to curb subsidy payments to the power sector.** Consistent with its plans for fiscal consolidation agreed with IMF, the government reduced subsidies to the power sector to 1.2 percent of GDP in FY13/14 by introducing significant increases for all tariff classes which was recognized in the first operation. To support its plans to bring electricity subsidies down further, this action requires MWP to make explicit the amount that it will provide as subsidies to the regulator which in turn will ensure that the subsidy amount is taken into account in its determination of consumer tariffs for the fiscal year. This aligns subsidy budgeting with tariff setting, in line with the government's wider targets of reducing the fiscal deficit. The original target was 0.7 percent of GDP for FY14/15 and the subsidy budget was set accordingly, but a combination of a delay in tariff setting and a lower than expected GDP growth resulted in the actual outturn of 0.8 percent.

*DPC2 Prior Action 2: MWP has published in its website a cap for total overdue payables to power generators not to exceed PKR 314 billion and a plan to reduce the flow of new overdue payables to 39 billion by FY17/18, with interim targets for the flows of PKR 92 billion in FY15/16 and PKR 57 billion in FY16/17.*

38. **The circular debt in the sector has serious fiscal and sectoral impacts.** Following the First Power Sector Reform Development Policy Credit (DPC1) prior action by the government to settle the circular debt, it has re-emerged. The underlying causes include the inability of Discos to recover their full costs either from their customers or from government. The cash shortfall means that they cannot pay the bills for electricity supplied to them. In turn, the public generators are unable to pay their fuel bills and IPPs curtail their supply. The consequent shortages of electricity are the main cause of load shedding, and all the economic and social impacts that follow in its wake. Experience suggests that when overdue payables reach about PKR 250-300 billion the system starts to fail.

39. **The government has made serious efforts in the last year to reduce the accumulation of overdue payables to the sector.** By November 2014 the stock of circular debt had risen to PKR 321 billion, with an average monthly addition of PKR 15 billion. Concerted action to improve Ministry of Water and Power's collections, improved efficiency in dispatch, recovery by Discos of past receivables, improved conditions associated with the reduced oil price and some additional borrowing helped to reduce the stock to PKR 314 billion by June 2015 while staying within the fiscal constraints agreed as part of the IMF program.

40. **A systematic effort is required to bring the circular debt under control.** The accrued debt on the Discos' books is a contingent liability on the government which it has discharged sporadically when it reaches a crisis. The proposed measure is aimed at monitoring and reducing that liability as quickly as possible. In the action plan, the government has identified the components of the circular debt and how it will deal with each one of them, with timings and expected results. The introduction of the cap requires that the underlying issues are addressed sustainably since otherwise the outstanding payments will have to be made from the federal budget. Quarterly monitoring through the IMF program will support the government in its efforts to contain and eventually bring down the circular debt.

*DPC2 Prior Action 3: The Government has implemented a mechanism based on tariff surcharges and Tariff Rationalization Fund to maintain national uniform tariffs in Discos while ensuring cost recovery.*

41. **An alternative method of financing the uniform tariff policy is needed.** About 45 percent of all electricity subsidies in FY12/13 were used to maintain the government's policy of

uniform national tariffs. Under the historical implementation of the policy, the lowest determined tariff for any particular consumer category among all Discos was notified, and the government made up the shortfall in the Discos' revenues from its budget. This new measure was introduced in November 2014 and not foreseen when the first operation in the series was prepared. It was taken in response to falling fuel costs and introduced a surcharge that equalized the tariffs across seven of the ten Discos. The seven Discos affected were those whose tariffs would have fallen as a result of the periodic fuel price adjustment but were, by virtue of the surcharge, maintained at their pre-November levels. The remaining three Discos have continued to receive the subsidy to bring their tariffs down to the uniform rate.

42. **Results.** The measures introduced in this policy area support the reduction in power sector subsidies to 0.8 percent of GDP in FY14/15 and will support the aim of further reduction to 0.4 percent in FY15/16. The reduced subsidy is reflected directly in the proposed operation's results, while the broader impact will create fiscal space for poverty reduction actions and enable further targeting of subsidies to the poorest. The expected result from better management of the circular debt will be reduced load shedding which has a positive impact on the productive sectors of the economy.

***Policy Area B: Improving Sector Performance and Opening the Market to Private Participation***

***DPC2 Prior Action 4: MPNR has signed supplemental agreements agreeing revised prices for 92 exploration concessions and production leases at the levels set out in the 2012 Petroleum Policy, including 26 with the private sector.***

43. **Domestic gas offers a bridge to increased generation at lower cost.** Gas is a low cost and indigenous resource but has lost share in generation in recent years because of poor incentives to explore and produce it, and because the government has allocated gas to other sectors, reducing its availability for power generation. Estimates suggest that about 2,500 – 2,800 MW of additional generation capacity from existing plant could be brought on line if there were sufficient gas available. The 2012 Petroleum Policy is well regarded by the gas exploration and production industry in Pakistan and it provides for better pricing and other incentives for gas production. Concession holders applied for conversion of about 200 of the 350 existing concessions in Pakistan when the Policy was introduced. The first operation supported the award of new concessions and measures for increasing prices for incremental production as well as preparing a model supplemental agreement to cover the conversion to the 2012 Petroleum Policy. The measure in this proposed second operation has ensured that most of the eligible applications have been processed. The action should encourage additional gas production and increase reserves which could be made available for power generation and other uses. In addressing the backlog of applications, MPNR has had to change the way it does business, and will go some way to restore the confidence of the private sector investors in the upstream oil and gas sector.

***DPC2 Prior Action 5: The Economic Coordination Committee of the Cabinet has approved policy directives that LNG will be provided to consumers who pay its full cost through the tariff.***

44. **Pakistan started to import liquefied natural gas (LNG) in March 2015.** Although costs are uncertain because supply contracts are often linked to the volatile oil price, LNG is expected to be more expensive than domestic gas. The purpose of the measure is to ensure that LNG supplies are not diverted to end consumers who pay below current average cost of gas supply, particularly households. This should give comfort to potential LNG suppliers and investors in LNG facilities and thus mitigates the risk that the government will be required to

guarantee or meet the differential from its own budgetary resources. The measure was not foreseen in the previous operation, because LNG import was not considered likely at that time.

***DPC2 Prior Action 6:*** (i) CPPA (G) has demonstrated operational capability to handle all steps in the billing and settlement cycle of electricity sales by Generators and purchases by Discos; and (ii) NEPRA has granted an amendment to NTDC license to eliminate CPPA functions.

45. **Structural reforms in the power sector have stalled.** Until there is an independent market operator with a mandate to develop competition, the sector is stuck, unable to move forward to greater competition, private participation and renewed investment or back to a vertically integrated public sector monopoly. The legal and regulatory framework is designed for private participation, but the sector structure is firmly rooted in the public sector. The resulting mismatch in incentives and conflicts of interest among market participants discourage new entrants. For example, National Transmission and Despatch Company (NTDC) was licensed in 2002 to include Central Power Purchasing Agency (CPPA) as a transitional measure under which NTDC was also assigned the task of developing competitive markets even though this conflicts with its role as a transmission operator. This transitional arrangement has persisted until the implementation of the measures supported by this operation.

46. **Operationalizing CPPA Guarantee – CPPA(G) – is essential to open the sector to competition and new investment.** The continued operation of CPPA as a part of NTDC creates a conflict of interest, encourages opaque transactions and pricing, and will be an obstacle to the privatization of both generation and distribution assets. This action has created a transparent system that separates the management of commercial obligations and cash flows into a separate entity, CPPA (G) as a result of which an investor has clear rights and obligations which will help attract qualified operators, and reduce the discount that bidders may apply due to perceived market risk. The requirements for operationalization are well understood and documented and include novation and creation of contracts between the new independent agency CPPA (G) and other market participants. The mandate of CPPA (G) also includes market development, though the preparation and implementation of a Commercial Code that will move the sector towards wholesale competition. The action became irreversible when the CPPA function was eliminated from the NTDC license. The proposed prior action is therefore the end point in a process which was started in the first operation with establishment of CPPA (G) as an independent agent and should help ensure sustainability of the reforms.

47. **Results.** The expected results from this policy area are twofold. First, the actions relating to gas are expected to increase supply in the short and medium term, making it possible to use better the existing power generation assets while also bringing down the average cost of electricity. The second result will be to bring about a substantial market reform that can be expected to increase private participation, competition and improved sector performance. Greater availability of electricity will support economic growth, while lower cost electricity improves the competitiveness of Pakistani industry and also improves access for the poor.

### ***Policy Area C: Ensuring Accountability and Transparency***

***DPC2 Prior Action 7:*** CPPA (G) publicly disclosed on its website the monthly amounts due, and payments made, by each Disco to CPPA (G), and by CPPA (G) to Generators, including arrears.

48. **Transparent accounting for all parties will build investor confidence.** This proposed measure builds on the DPC1 action that made operational information public and develops it further by introducing access to financial information and increasing transparency for privatization. Given the liquidity shortages in the sector, generators are often paid less than they

are owed by the Discos. IPPs, with obligations to banks and suppliers, need reassurance that they are not being discriminated against. In the longer term, IPPs may prefer to sell directly to individual Discos rather than through CPPA (G), and a record of payment will aid decision making. The Discos also benefit because the better payers will be in a position to buy sufficient electricity to avoid load shedding. The action would build on earlier measures to encourage transparency for market participants.

***DPC Prior Action 8: NEPRA has disclosed the annual Discos’ performance and evaluation report, and has initiated outreach action to consumers on the content thereof; and Discos have disclosed on their respective websites their annual performance reports, including their plans to improve service delivery.***

49. **Transparency about service performance is essential to build consumer confidence.** Under their licenses, Discos are obliged to report on their performance to NEPRA, but historically this reporting has been poorly done and not disclosed to the public. NEPRA carries out each year the comparative assessment among Discos and K-Electric, but the report has not been disclosed until now. Potential investors in both Discos and Gencos have a strong interest in understanding Disco performance and how the regulator views it. Consumers generally lack confidence in the performance of their Discos and have had no means of monitoring it. Making public NEPRA’s comparative assessment report will put pressure on the worst performing Discos as well as facilitate building consumer confidence for the better performing ones. The proposed measure will improve the supply of information and complementary activities to be supported by donors are aimed at building increasing demand for information. This action combines the two triggers originally set out in DPC1 and focuses on monitoring of licensing through the regulator rather than management by MWP.

50. **Results.** Greater accountability and transparency are expected to improve the quality of the structural reforms by ensuring better understanding among stakeholders. In a world of scarce investment capital for privatization, a more transparent sector is likely to attract international investors. It also helps to manage the risk of reversal of all the proposed actions in the program.

***Analytical Underpinning***

51. **The Bank and other partners have undertaken extensive analytical work that supports the prior actions for the proposed operation.** Table 5 shows the analytical work undertaken between 2010 and 2014 and its linkages to the prior actions supported by this operation.

**Table 5: Prior Actions and Analytical Underpinnings**

Prior Actions	Analytical Underpinnings
<b>Policy Area A: Reducing Subsidies and Improving Tariff Policy</b>	
<b><i>Prior Action 1:</i></b> Following the mechanism in 2014 Tariff and Subsidy Policy Guidelines, MWP has informed NEPRA of the FY14/15 subsidies by consumer category to incorporate in the tariff determination of each Disco, to apply in FY14/15 expected to result in electricity subsidies to be reduced to 0.8% of GDP.	Reforming Electricity Subsidies in Pakistan: Measures to Protect the Poor. World Bank: Working Paper 93762. Building an Efficient Energy Sector, Pakistan Policy Note 1, World Bank, 2013. Pakistan’s Power Sector: A Joint ADB-WB Review, November 2012. Rethinking Electricity Tariffs and Subsidies in Pakistan, World Bank Policy Note, July 2011. This analytical work shows how untargeted power sector subsidies cause a significant drain on the budget, and that the poor benefit little.
<b><i>Prior Action 2:</i></b> MWP has published in its website a cap for total overdue payables to power generators not to exceed PKR 314 billion and a plan to reduce the flow of	USAID The Causes and Impact of Power Sector Circular Debt in Pakistan, 2013. Integrated Energy Sector Recovery Report and Plan, Friends of Democratic Pakistan, Energy Sector Task Force, Manila – Asian Development Bank,

Prior Actions	Analytical Underpinnings
new overdue payables to 39 billion by FY17/18, with interim targets for the flows of PKR 92 billion in FY15/16 and PKR 57 billion in FY16/17.	2010. This analytical work shows how the circular debt impacts availability of electricity and the structural changes needed to eliminate it.
<b>Prior Action 3:</b> The Government has implemented a mechanism based on tariff surcharges and Tariff Rationalization Fund to maintain national uniform tariffs in Discos while ensuring cost recovery.	Pakistan's Power Sector: A Joint ADB-WB Review, November 2012. This analytical work shows how the uniform national tariff, which is a policy decision of the government, further raises the subsidy required and thus impact on the budget, and how other options can shift the cost to consumers.
<b>Policy Area B: Improving Sector Performance &amp; Opening the Market to Private Participation</b>	
<b>Prior Action 4:</b> MPNR has signed supplemental agreements agreeing revised prices for 92 exploration concessions and production leases at the levels set out in the 2012 Petroleum Policy, including 26 with the private sector.	Building an Efficient Energy Sector, Pakistan Policy Note 1, World Bank, 2013. Integrated Energy Sector Recovery Report and Plan, Friends of Democratic Pakistan, Energy Sector Task Force, Manila – Asian Development Bank, 2010. This work shows the importance of domestic natural gas in the generation mix, and how better availability of gas can increase electricity supply while also reducing its cost.
<b>Prior Action 5:</b> The Economic Coordination Committee of the Cabinet has approved policy directives that LNG will be provided to consumers who pay its full cost through the tariff.	Natural Gas Roundtable, World Bank Islamabad, December 2013. Building an Efficient Energy Sector, World Bank, 2013. The feedback from the roundtable indicates that without full cost recovery for LNG there is a risk that gas companies may be drawn into their own equivalent of the circular debt.
<b>Prior Action 6:</b> (i) CPPA (G) has demonstrated operational capability to handle all steps in the billing and settlement cycle of electricity sales by Generators and purchases by Discos; and (ii) NEPRA has granted an amendment to NTDC license to eliminate CPPA functions.	ADB Technical Assistance: Establishment and Commencement of the CPPA, 2009. The technical assistance outlined the means by which CPPA (G) could be created and separated from NTDC, in compliance with the requirements of NTDC's license and the plan for sector reform.
<b>Policy Area C: Ensuring Accountability and Transparency</b>	
<b>Prior Action 7:</b> CPPA (G) publicly disclosed on its website the monthly amounts due, and payments made, by each Disco to CPPA (G), and by CPPA (G) to Generators, including arrears.	Gaining Traction: The importance of transparency in accelerating the reform of fossil-fuel subsidies, International Institute for Sustainable Development, UNEP and Global Subsidies Initiative April 2010. Communication and Governance a Topic Guide: World Bank August 2011. This analysis shows the importance of public disclosure of information in improving accountability and transparency as a way to improve sector performance.
<b>Prior Action 8:</b> NEPRA has disclosed the annual Discos' performance and evaluation report, and has initiated outreach action to consumers on the content thereof; and Discos have disclosed on their respective websites their annual performance reports, including their plans to improve service delivery.	

### 4.3. Link to CPF, Other Bank Operations and the World Bank Group Strategy

52. The CPS for FY15-19<sup>3</sup> includes a pillar exclusively for energy. It seeks a structural and a cost transformation in the energy sector and includes reductions in load shedding, subsidies, and costs as its outcomes. The proposed DPC is a cornerstone of the new CPS, and complements the Second Fiscally Sustainable and Inclusive Growth DPC<sup>4</sup> which addressed key structural efforts over the medium term, introducing new measures in tax administration, trade competitiveness, the business climate, and access to finance.

<sup>3</sup> Report 84645-PK discussed on May 1, 2014

<sup>4</sup> Cr 5682-PK approved on June 18, 2015

53. **The Bank Group has embarked upon a “Transformational Power Initiative”, to support significant new investments and reforms in the power sector.** The initiative aims to mobilize over \$10 billion over the next five years, to support new generation in a mix of public and private projects that address current supply gaps and future needs. The Bank supports sector reform and public investment, including the Tarbela hydropower fourth and fifth extension, the Dasu hydropower project and modernization of the power transmission system. International Finance Corporation (IFC) has made an equity investment with a private sector renewable energy group to develop around 3,000 MW over the next five years, including mid to large hydropower and wind. IFC will also be mobilizing capital from international equity investors and lenders to support a large pipeline of projects in hydropower and LNG import. The Bank and IFC continue to work together on the Central Asia-South Asia Regional Electricity Transmission and Trade Project (CASA-1000) to bring Central Asian power to Pakistan. MIGA is seeking opportunities to support increased participation of international investors and lenders in Pakistan's power sector in collaboration with IFC. Improvements in the business climate brought about by reforms are showing results in increased investment; the government recognizes this to be a product of structural reform and is thus encouraged to continue with its reforms.

**4.4 Consultations and Collaboration With Development Partners**

54. **Government has made efforts to consult for the proposed operation.** The government does not have a good track record of consulting with stakeholders, but during preparation of the proposed operation it has reached out to a number of groups. It has held a consensus building workshop on power sector privatization aimed at ensuring all branches of government, related authorities and the companies themselves signed up to the process. Federal and provincial governments consult through the Council of Common Interests and on specific initiatives on development of regulations for wheeling and captive power. In the regulatory sphere, both NEPRA and OGRA have strong consultation protocols and NEPRA in particular holds public hearings on all petitions which it examines. It has consulted on the license modification of NTDC, on the new Market Operator Rules. The Commercial Code includes provisions for consultation on any changes being considered.

55. **The proposed DPC series is planned to be co-financed with other development partners.** Energy sector policy dialogue and support to the IMF over recent years has been carried out jointly with Asian Development Bank (ADB). ADB is contemplating financing a second tranche of its program loan; seven out of the eight policy actions in the proposed operation appear in the ADB policy matrix. Results are being monitored in cooperation with ADB. Japan International Cooperation Agency (JICA) is contemplating its participation in the proposed operation. There have been frequent consultations with the UK’s DfID and United States Agency for International Development (USAID) throughout preparation of the proposed operation.

56. **Technical assistance.** A substantial program of technical assistance is under way financed by the main development partners involved in the energy sector, as outlined in Table 6. Much of the proposed work plan will be supported with funding from a DfID trust fund and also by the Australian Department of Foreign Affairs and Trade.

**Table 6: Technical Assistance To Support Program**

Technical Assistance / Support	Donor
<i>Policy Area A: Reducing Subsidies and Improving Tariff Policy</i>	
Support for development of key performance indicators for NEPRA Multiyear tariff implementation	WB (with DfID support)

Technical Assistance / Support	Donor
Training for new staff and members	
Review of electricity market framework Cost of service studies in four Discos Business plans for three Gencos	USAID
<i>Policy Area B: Improving Sector Performance &amp; Opening the Market to Private Participation</i>	
Support operationalization of CPPA and market rules	ADB, WB (with DfID support)
Review of NTDC license	WB (with DfID support)
Support for preparation of energy conservation measures; TA for preparation of least cost expansion plan	JICA, UNDP
Roadmap for unbundling downstream gas into separate transmission and distribution operations	WB (with DfID support)
Building consensus around power sector privatization	WB (with DfID support)
Legal and commercial support for LNG	USAID
Building capacity of Privatisation Commission on power sector privatization program	ADB, USAID, WB (with DfID support)
<i>Policy Area C: Ensuring Accountability and Transparency</i>	
Support to MPNR and MWP monitoring unit	ADB and WB (with Australian financing)
Support for development of an outreach program for NEPRA	WB

## 5. OTHER DESIGN AND APPRAISAL ISSUES

### 5.1 Poverty and Social Impact

57. **The reduction of electricity subsidies will negatively impact the poor.** The IMF program requires Pakistan to reduce its electricity subsidies from 1.5 percent of GDP in FY12/13 to 0.4 percent of GDP in FY15/16. The expected net impact of the full program is now lower than forecast in DPC1, owing to sharper than expected falls in oil prices over the past year. Although there have been no increases in tariffs for those consuming less than 200kWh/month, the analysis here shows that the increase in residential tariffs for higher levels of consumption will nevertheless impact all poor households.

58. **The poor will be affected in three ways.** The poverty and social impact analysis (PSIA) carried out in support of the proposed operation models the subsidy reduction as an increase in the final electricity prices paid by consumers. Annex 5 describes the methodology in detail. The first way in which the poor are affected is through tariff increases, by which some poor households which consume more than 200kWh/month in grid electricity will see their bills increase. Second, the price of other consumption goods that have some component of electricity in their cost will increase, negatively affecting all poor households in the country. Third, counterbalancing these short-term negative impacts, the broader reform process will improve the reliability, quality and quantity of electricity supply, bringing better employment prospects as the economy picks up. Moreover quality of life for the connected poor will improve as load shedding tends to affect them disproportionately. Those not yet connected, who are overwhelmingly poor, will have improved prospects of connection to the grid.

59. **An across the board tariff increase will be progressive, but have a significant effect on the poor.** If government continues to reduce residential subsidies sufficiently to reach the 0.4 percent of GDP target in FY15/16, the poorest two income quintiles are expected to see an overall 2.1 percent increase in their cost of living by then relative to the counterfactual that the



program of subsidy reductions from FY12/13 onwards had never taken place. This is lower than the 2.5 percent impact forecast in DPC1, again because of the more favorable macroeconomic conditions. For the poor, about two-thirds of this increase is the indirect impact of increasing electricity prices on the general cost of living. For the richest quintile, conversely, three-quarters of the increase is from the direct impact of higher electricity bills. This illustrates that the insulation of the lowest tariff slabs from tariff increases does disproportionately protect the poor, but they are still exposed to a considerable welfare impact through the indirect channel.

**60. Dealing with the direct impacts requires further action by government.** Although the first round of increases has not affected the consumers of smaller amounts of power, some poor people will have been affected because there is only a weak correlation between poverty and electricity consumption. The government has stated its intention to target electricity subsidies to the poorest 20 percent of the population and has started the analytical work necessary to underpin such a change. Until such time as a more targeted system is in place, the existing blanket subsidy for all consumers of less than 300kWh per month will remain in place.

**61. Indirect impacts will be addressed through the BISP.** The Fiscally Sustainable and Inclusive Growth DPC series supports reforms to the BISP. In the first Growth DPC, the basic cash payment to beneficiary households was increased and improved budget management meant the share of households receiving their payments on time roughly doubled to over 80 percent. While the one-off increase in the cash payment has compensated BISP beneficiary households for the full impact of the electricity price increases, it will not insulate them against future rises in electricity tariffs. A further measure that could be taken would be to link BISP payments to inflation, thus ensuring their real welfare is preserved without government needing to resort to again increasing electricity subsidies.

62. Table 7 shows the increase in the cost of living for the average poor household in FY15/16 under the reform scenario relative to the baseline (“no reform”) case. Figure 2 overleaf shows the share of the total subsidy payments each income quintile would receive under each scenario.

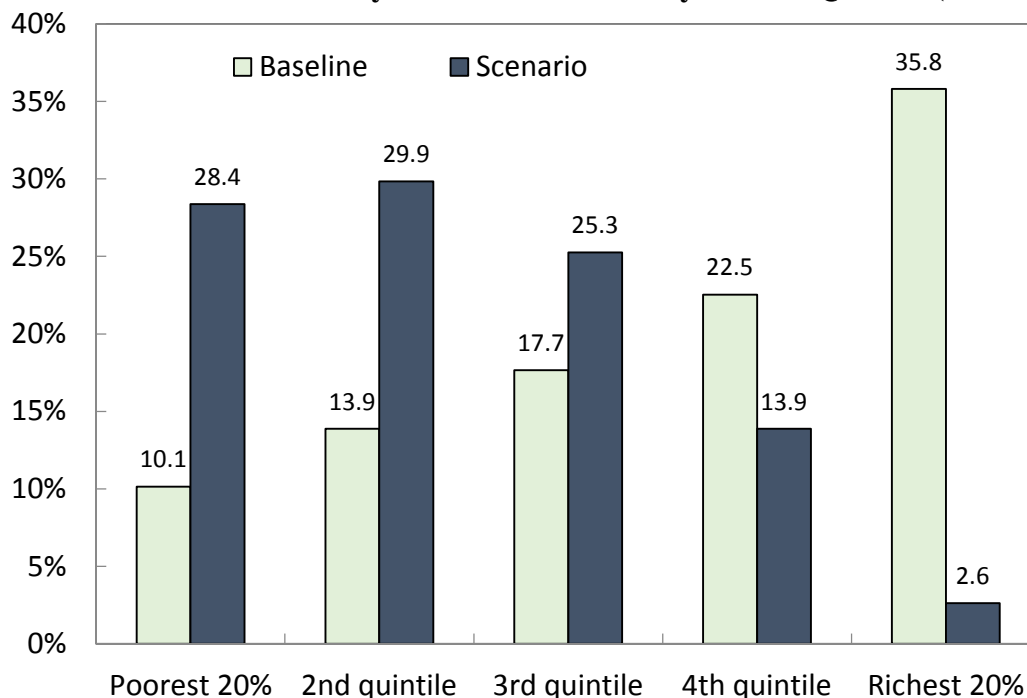
**Table 7: Projected Increase in Cost of Living under Various Scenarios (Average by Income Quintile; FY15/16)**

	<i>PKR/Month</i>	<i>% HH consumption</i>
<b>Poorest 20%</b>	321	2.1
<b>2nd Quintile</b>	586	3.0
3rd Quintile	910	4.1
4th Quintile	1,331	5.3
Richest 20%	2,064	5.7

63. While the government presently relies on cross-subsidization to protect low-volume consumers, other options would perform significantly better in protecting the poor. One option is to replace tariff-based subsidies with a direct subsidy, for example with cash subsidies or vouchers explicitly linked to electricity consumption. Another is to maintain the current subsidized structure for smaller consumers, but restrict access to these tariffs based on poverty criteria, and charge all other households cost-recovery tariffs plus relevant surcharges even for low levels of consumption. The Bank is providing technical assistance to the government in analysis of the options with a view to introducing changes to the present, inaccurate means of targeting.

64. Gender effects are likely to be positive. The substitution of BISP payments for direct electricity subsidies would positively affect women and girls. Women are the direct beneficiaries of BISP payments and therefore any increase in BISP payments will put additional cash into their hands, thus empowering them. Second, the introduction of a conditional cash transfer element for primary education that can be enabled by reduced government expenditures for electricity subsidies, is likely to benefit girls who tend to have lower attendance rates.

**Figure 2: Share of Electricity Subsidies Received by Income Quintile (FY15/16)**



## 5.2 Environmental Aspects

65. **There are no significant negative environmental consequences of the prior actions.** Prior action 1, reduction of subsidies in the current FY, can only have a positive impact. Normally, reduction of subsidies would increase tariffs to consumers who would in aggregate reduce consumption. Because the extent of current power shortages is so great, it is likely that other consumers would readily take up that decline. At worst, therefore, aggregate generation would not change, and no environmental consequences would follow. The other seven prior actions are directed towards improving the efficiency and financial health of the sector: The environmental consequences that follow from the investments and tariff policies resulting from the reforms are greater and therefore deserve examination.<sup>5</sup>

66. **The reform program is a significant step to setting the power sector on a more environmentally sustainable path.** The analysis is based on an energy balance model that allows consistent calculation of economic and environmental impacts. It investigates the three policy actions that have quantifiable environment impacts: reducing subsidies and improving

<sup>5</sup> Worldwide experience suggests high correlation between the financial health of utilities and their environmental performance. Utilities under financial stress are less likely to spend money on preventative maintenance, on upgrading the distribution system (where most T&D losses occur), on proper operation of pollution control equipment, and on the retirement of old inefficient and more polluting plant - all of which result in greater environmental impact for the same level of consumption.

their targeting to the poor; improving sector performance by loss reduction and improving Disco collection rates; and increasing gas supply to generation. In addition, it takes into account two other actions: introduction of least-cost generation planning; and improving demand side efficiency which were supported under the first operation in this series. By 2020, these policy actions are expected to displace 11,906 GWh/year of oil fired generation and supply an additional 17,817 GWh/year of energy to the grid, representing an increase of 11.7 percent compared with no actions. An additional 15,026 GWh of energy will be supplied to end users, a 12.4 percent increase compared with no actions.

67. **Greenhouse gas intensity will nearly halve.** In 2008, the power sector emitted 27 percent of the total of Pakistan's 167 million tons of greenhouse gases (GHG). The energy balance model calculates 2014 emissions from the power sector at 43 million tons, increasing in the base case – without reforms – to 50 million tons/year by 2020. The corresponding emissions per capita increase from 0.23 tons/year to 0.24 tons/year. The program is forecast to bring about a net decrease of emissions from the power sector in absolute terms from 50 to 46 million tons. Emissions per unit of electricity produced are estimated to reduce from 0.49 kg/kWh to 0.27 kg/kWh, the result of a combination of substitution effects. New hydro and increased gas generation from existing plant are expected to substitute for generation using heavy fuel oil (HFO) and diesel. One coal plant, at Jamshoro, is expected to enter service. It will be financed by ADB and meet best international standards, including using supercritical technology. Offsetting this lower carbon intensity is the increased aggregate generation possible as a result of new capacity and additional fuel availability. These benefits are, however, at risk if hydropower projects are delayed, or if less than the targeted 1.2 billion cubic feet per day of additional gas is available.

68. **Local environmental damage will be lessened significantly.** Reducing commercial losses and subsidies will both increase the effective price of grid connected electricity. Consumers with low willingness to pay for electricity, whether they are pilferers or the poor, will consume less. In Pakistan, where supply is constrained, the consumption forgone by these groups will be taken up by consumers with a higher willingness to pay, most likely those using a standby generator, the costs of which may be 25¢/kWh or more. The analysis finds that the reforms are likely to result in a reduction in self-generation of about 11.7 Terawatt hours (TWh) per year. In Pakistan it is estimated that self-generation results in the emission of about 19.5 g/kWh of oxides of nitrogen (NO<sub>x</sub>) and 1.34 g/kWh of particulates with an effective diameter of 10 microns or less (PM<sub>10</sub>), thus the net reductions in these local pollutants as a result of reduced self-generation will be about 228,000 tons of NO<sub>x</sub> per year and about 15,700 tons of PM<sub>10</sub>. Health damage costs are estimated to be \$605/ton NO<sub>x</sub> and \$15,180/ton of particulates, thus there is an additional economic benefit of some \$376 million resulting from people enjoying better health as a result of lower local air pollution levels.

69. **The implementation of the least cost investment plan will shift the generation mix towards hydropower and gas.** Plants now being commissioned, under construction and with financing in place will continue to enter service as scheduled. From about 2019 onwards, there will be a shift towards hydropower and natural gas in the generation mix, offsetting incremental capacity additions of about 600 MW of imported and domestic coal-fired plants by 2020, adding to the existing fleet of around 100 MW today.<sup>6</sup> It will also include small hydropower, solar and

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<sup>6</sup> The World Bank does not anticipate financing any coal-fired generation. In line with the 2013 Energy Directions Paper, the World Bank Group will finance coal-fired generation only in rare circumstances, but supports a long term approach to sector-wide planning to help secure adequate, reliable and sustainable energy supply.

wind generation. There will be less oil and diesel-fueled thermal plant. Energy efficiency will be an important part of the policy and will reduce demand for new plant in the future.

70. **Impacts on natural resources are expected to be limited and manageable.** New hydropower reservoirs have the potential to affect forests and consumptive water use (GHG emissions from Pakistan’s hydro reservoirs are low) as well as displace people. Pakistan’s hydropower resource, however, is largely based in the north west of the country, and many of the candidate projects are run of river and thus have relatively small reservoirs. They tend to be in areas where population density is low. Thermal generation will affect water abstraction primarily for cooling water make-up; coal projects will result in increased mining with attendant solid and liquid waste disposal requirements and other potential environmental impacts. Water requirements for modern, state-of-the-art thermal plant are lower than the existing HFO plant they will replace and can therefore expect to have a neutral or slightly beneficial effect on water consumption.

71. **The recent decrease in oil and gas prices may slow down the pace of substitution and therefore the timing of environmental benefits discussed but does not result in any negative environmental impacts.** Moreover, there is great uncertainty about the level of international oil and gas prices in the medium and long term, and the duration of time for which the present low prices will persist. And even if the gas price were unchanged, and only the oil price halved, because of the much higher thermal efficiency of combined cycle gas generation, gas generation is still cheaper than oil. With gas prices also falling, gas CCGT generation will always be cheaper than fuel oil. Table 8 shows a comparison of generation costs for fuel oil and the most expensive additional gas supply (LNG). In 2014, oil was 2.52 times more expensive per kWh than gas; in March 2015, 2.07 times more expensive.

**Table 8: Comparison of Cost of Gas and Fuel Oil Generation, 2014 and 2015**

		Gas (LNG)	Oil	Ratio oil:gas
Efficiency	[%]	54	36	
<b>June 2014</b>				
Fuel cost	\$/mmBTU	11.22	18.85	
Generation cost	USc/kWh	7.09	17.87	2.52
<b>March 2015</b>				
fuel cost	\$/mmBTU	8.00	11.05	
Generation cost	USc/kWh	5.06	10.47	2.07

72. **As a result of the oil price fall, the magnitude of the difference between the cost of grid electricity and diesel self-generation has narrowed, but still remains significant.** Among the main tariff categories, the highest for grid electricity (including GST) is for commercial consumers. In 2014, self-generation was 1.3 times more expensive than grid electricity (Table 9), in 2015 1.33 times more expensive. The lowest grid electricity tariff is for residential, for which in 2014, self-generation was 2.31 times as expensive as grid purchases, in 2015 2.20 times as expensive. The price differentials that drive the substitution (if more grid supply is made available as a result of the policy reforms) are little changed. Therefore, even at lower oil prices, increased availability of (gas-powered) grid supply will continue to result in reduction in oil based self-generation, with concomitant reductions of GHGs and local air emission damage costs (since GHG emissions and local air pollutants are far lower for gas than for oil per kWh, even when T&D losses are taken into account).

**Table 9: Comparison of the retail consumer cost of grid electricity and diesel self-generation (PKR/kWh)**

		Grid	Self-generation	Ratio: self-gen to grid
<b>Commercial</b>	2014	21.9	28.3	1.30

	2015	16.1	21.5	1.33
<b>Industry</b>	2014	18.1	28.3	1.57
	2015	13.3	21.5	1.62
<b>Agriculture</b>	2014	14.5	28.3	1.96
	2015	10.5	21.5	2.05
<b>Residential</b>	2014	12.3	28.3	2.31
	2015	9.8	21.5	2.20

*For self-generation the cost shown is for fuel only, and excludes the additional costs of lubes, capital cost depreciation and any fixed maintenance costs – whose inclusion would make self-generation more expensive than shown. The GST on HSD is at the old rate of 27% - this is announced to be raised to 37%, at which level the costs of self-generation is even higher*

### 5.3 PFM Disbursement and Auditing Aspects

#### **Public Financial Management**

73. **Pakistan has a fairly well-developed infrastructure for public financial management (PFM).** According to the Pakistan Federal Government Public Expenditure and Financial Accountability (PEFA) Update (2012), the trajectory of change is positive with PEFA scores comparing favorably with other countries in the South Asia region. The overall fiduciary risk associated with the proposed operation is Substantial. This assessment is made with due regard to the government’s commitment to overall PFM reform exemplified by actions already taken at the federal and provincial levels, as well as the weakness in the PFM cycle identified in PEFA and other analytical reports. Pakistan’s public financial management is discussed further in Annex 6.

#### **Disbursement and auditing**

74. **Borrower and Credit agreement.** The proposed Credit would be made to the Islamic Republic of Pakistan, represented by the Economic Affairs Division of the MoF. The Credit proceeds would be transferred to the government in accordance with the terms of the Financing Agreement.

75. **Funds flow arrangement.** The Government will identify a foreign exchange account with SBP, which forms part of the country’s official foreign exchange reserves, into which the proceeds of the Credit will be disbursed. The proceeds will be released in one tranche following approval and official communication by IDA of Credit effectiveness. The completion of the prior actions and the maintenance of a satisfactory macroeconomic framework are sufficient to release the funds. The PKR equivalent of the funds in the account will, within two working days, be transferred into the consolidated fund of the government Account No. 1-Non-Food, held with SBP, which is used to finance budgetary expenditures.

76. **Disbursements.** Disbursements from the Consolidated Fund for activities to be financed under the program by the Government will not be linked to any specific purchases, and no special procurement requirement shall be needed. The proceeds of the Credit shall, however, not be applied to finance expenditures in the excluded expenditures as defined in the Financing Agreement. If any portion of the Credit is used to finance ineligible expenditures as defined in the Financing Agreement, IDA will require the Government promptly upon notice from IDA, to refund the amount equal to the amount of the said payment to the IDA. Amount refunded to IDA upon such request will be cancelled from the Credit.

77. **The financial statements of SBP for the financial year ended 30 June 2014 were audited.** The auditors gave an unqualified opinion on the statements concluding that the statements gave a true and fair view of the financial position, financial performance, and cash flows. An IMF Safeguards Assessment of the SBP was issued on March 27 2009 and an update report was also produced on March 3 2010. A further update report was produced by the IMF on

December 16, 2013. All three of these Safeguards Assessment reports have been reviewed by the World Bank.

78. **Accounting and Assurance requirement for the Credit.** SBP, on behalf of the Government, will continue to maintain an appropriate accounting system in accordance with generally accepted accounting principles. The IMF Safeguard Assessment in 2013 revealed implementation of the majority of actions previously agreed with the SBP with further improvements of internal controls and foreign exchange reserve management still in progress. Within 45 days of disbursement of the Credit, the SBP will provide a written confirmation to IDA certifying the receipt of the PKR equivalent of the Credit into the consolidated funds account of the Government, the date of receipt, and exchange rate to translate the credit currency into Pakistan Rupees. If needed, the auditors of SBP will be asked to provide a special opinion confirming that the DPC funds were paid into the official foreign exchange reserves and that an equivalent amount was credited to the state budget taking into account the exchange rate used for the transaction.

#### **5.4 Monitoring and Evaluation**

79. **Program monitoring is an integral part of the operation.** A lesson learned from past energy policy lending is that solid monitoring and evaluation must be integrated into the policy dialogue. For this reason, establishment of delivery units in MWP and MPNR with terms of reference to include monitoring of the energy sector reform, quarterly reporting and public disclosure was included as a prior action in DPC1. Those units produced their first quarterly report in December 2014, which was reviewed by the ECC and second reports in March and April 2015. Staffing is to be expanded to include full time specialized consultants. In addition, consultants contracted by the Bank and financed by trust funds are supporting the work of the delivery units. They have the capacity to evaluate and to advise on issues arising in the sector and bring relevant international experience. JICA is supporting the establishment of the monitoring units and advisors with technical assistance and it is expected that this task will be taken over by ADB funded consultants in due course.

80. **Monitoring will be conducted jointly with government and cofinanciers.** Ministry of Finance, cofinanciers including ADB and JICA, and the Bank will jointly monitor implementation. Formal review meetings will take place quarterly during the program's lifetime, and will be aimed to coincide with the IMF's quarterly reviews. Reviews will be based on the monitoring reports of the Delivery Units, but will also involve other agents, including NEPRA; the Economic Affairs Division of the government has indicated its intention to participate.

81. **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, 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](http://www.inspectionpanel.org).

## 6. SUMMARY OF RISKS AND MITIGATION

82. The overall risk of the proposed operation is high and specific risks are shown in Table 10.

**Table 10: Risk Categories for Proposed Second Power Sector Reform DPC**

Risk Categories	Rating (H, S, M or L)
1. Political and governance	H
2. Macroeconomic	H
3. Sector strategies and policies	H
4. Technical design of project or program	M
5. Institutional capacity for implementation and sustainability	S
6. Fiduciary	S
7. Environment and social	S
8. Stakeholders	H
9. Judicial intervention	S
<b>Overall</b>	<b>H</b>

83. **There is a high risk of political, social and industrial opposition to further reform if service quality does not improve.** Although the recent increases in billing levels have been offset by lower oil prices with consumers seeing little change in electricity bills, there is a risk that stakeholder expectations of service quality improvement, especially a reduction in load shedding, will be unfulfilled. There is also a risk that a worsening security or political situation could distract government from reforms, which may be tied to a widespread non-acceptance of the reforms and manifest itself as social action or unrest, for example by consumers refusing to pay their bills. These risks will be mitigated through maintaining the subsidized tariff and eventually improving its targeting; by institutions providing access to information on their websites; by working closely with government to enhance communication campaigns explaining the reform measures and the expected benefits to the public and industries of improvement; and because future tariff increases for households will be less as the subsidized component for higher income consumers is eliminated.

84. **Pakistan’s vulnerability to external and internal shocks causing macroeconomic fluctuations could derail macroeconomic stability.** Delays or ineffective implementation of policy measures would result in government not being able to maintain subsidy support to the power sector. This risk is mitigated by the growing confidence and capacity of the government to handle macroeconomic challenges; and the leverage brought by combined IMF and coordinated donor support programs. In particular the Bank and IMF will work in tandem and closely coordinate to support the government’s efforts to sustain the reforms.

85. **Both Discos and Gencos remain government owned and their managements have weak incentives to improve performance.** This risk is mitigated through the indicators and strategic business plan in the performance contracts signed by Discos and Gencos; NEPRA’s Monitoring Unit carrying out arms-length monitoring of licensees conditions and performance standards indicators; a law that is being adopted to criminalize the theft of electricity and

performance contracts; and the power purchase and fuel purchase agreements that are being concluded as part of the operationalization of CPPA (G).

86. **The risk that vested interests will oppose measures to commercialize, increase accountability and raise access to information is considered high.** This risk will be mitigated through close dialogue and support to government and NEPRA in implementing reform measures; and ADB support (technical and TA) for the operationalization of CPPA (G) as an independent company. The technical support will be aimed at making the sector more robust to challenges, and more able to adapt to the evolving political economy.

87. **Fiduciary risks are substantial, despite good progress in most phases of budget operations.** This assessment is made with due regard to the government's commitment to overall PFM reform exemplified by actions already taken at the federal and provincial levels, as well as weaknesses in the PFM cycle identified in the PEFA and other analytical reports. According to the 2012 PEFA the trajectory of PFM change is broadly positive and PEFA scores for Pakistan compare favorably with other countries in the South Asia region, especially on budget classification, transparency, and accountability in rendering financial statements. Furthermore Government of Pakistan is in the process of developing a PFM reform strategy at federal level which should go some way to mitigating risks set out in the 2012 PEFA report.

88. **The risk of judicial intervention delaying implementation of tariff adjustments and other reform measures is substantial.** Historically, consumer litigation and Supreme Court intervention have been based on different interpretations of the NEPRA Act or Tariff Rules. This may also be extended to the other rules and codes introduced during the proposed operation. This risk will be mitigated by the policy actions introducing greater clarity and enabling policies and rules to cover gaps and details that eliminate misinterpretation, and NEPRA and CPPA (G) adopting and making public guidelines with detailed methodologies, procedures and forward-looking benchmark-based formulae.

89. **It is highly unlikely that exogenous environmental or climate change risks would affect achievement of the PDO.** The risk rating for environment and social (Significant) relates largely to the potential social impacts of tariff increases and the ability to improve subsidy targeting performance. The policy actions will all have a positive effect on the environment, since the local environmental damage of costs of fuel oil and diesel are much greater than gas. The improved technical and commercial efficiency of the sector will improve the resilience to climate change related disaster risks (Section 5.4), and the shift from fuel oil to gas and hydro will significantly reduce GHG emissions (Section 5.2).



## ANNEX 1: Policy and Results Matrix For the Pakistan Power Sector Reform DPC

Prior Actions DPC 1	Prior Actions DPC 2	Results
<b>Policy Area A: Reducing Subsidies and Improving Tariff Policy</b>		
1. Ministry of Water and Power notifies the revised tariffs determined by NEPRA resulting in an average 44% tariff increase for industrial commercial and bulk consumers and an average 32% increase for households using more than 200kWh/month, agriculture and other consumers compared with tariffs effective June 2013.	1. Following the mechanism in 2014 Tariff and Subsidy Policy Guidelines, MWP has informed NEPRA of the FY14/15 subsidies by consumer category to incorporate in the tariff determination of each Disco, to apply in FY14/15 expected to result in electricity subsidies to be reduced to 0.8% of GDP.	<p><i>Result Indicator A1: Reduced subsidies allocated in Federal budget.</i></p> <ul style="list-style-type: none"> <li>• Baseline (FY12/13): 1.8% of GDP.</li> <li>• Target (end FY14/15): 0.8% of GDP.</li> </ul>
2. MoF settles power sector circular debt in the amount of PKR 480 billion.	2. MWP has published in its website a cap for total overdue payables to power generators not to exceed PKR 314 billion and a plan to reduce the flow of new overdue payables to 39 billion by FY17/18, with interim targets for the flows of PKR 92 billion in FY15/16 and PKR 57 billion in FY16/17.	
3. Economic Coordination Committee (ECC) approves the Tariff and Subsidy Policy Guidelines covering: (i) subsidy policy for low-income residential customers; (ii) multi-year tariffs; (iii) equalization mechanism and guidance for tariff setting as envisaged in the NEPRA Act, including forward looking fuel price adjustments; and (iv) guidance for circular debt management related to overdue payables to generators by CPPA.	3. The Government has implemented a mechanism based on tariff surcharges and Tariff Rationalization Fund to maintain national uniform tariffs in Discos while ensuring cost recovery.	
<b>Policy Area B: Improving Sector Performance and Opening the Market to Private Participation</b>		
4. (i) MWP instructs PESCO, HESCO, SEPCO, and MEPCO to outsource to the private sector collection of their respective feeders with losses of 50% or above; (ii) MWP instructs all Discos to implement a revenue protection program that ensures correct billing, reduces losses, in particular theft, and improves collections; (iii) Council of Common Interests initiates discussion on a mechanism to automatically withhold a proportion of the electricity arrears of provincial government entities; and (iv) Federal Government establishes mechanism to withhold budget transfers to federal agencies or entities which have arrears of payment for electricity that exceed 90 days of billing by Discos.		<p><i>Result Indicator B1: Increased bill collection in DISCOs.</i></p> <ul style="list-style-type: none"> <li>• Baseline (FY12/13): 86% of bills collected by DISCOs.</li> <li>• Target (end FY15/16): 90% of bills collected by DISCOs.</li> </ul>

Prior Actions DPC 1	Prior Actions DPC 2	Results
5. (i) MPNR discloses the 2013 Model Petroleum Concession Agreement on its website; (ii) MPNR announces the award of petroleum exploration blocks for the 2013 bidding round; and (iii) OGRA issues at least 3 pricing notifications to enable producers to start developing new and incremental gas production with increased prices allowed under the 2012 Petroleum Policy.	4. MPNR has signed supplemental agreements agreeing revised prices for 92 exploration concessions and production leases at the levels set out in the 2012 Petroleum Policy, including 26 with the private sector.	<p><i>Result Indicator B2: Increased gas supply.</i></p> <ul style="list-style-type: none"> <li>• Baseline: (FY12/ 13) 3.8 billion SCFD.</li> <li>• Target: (end FY15/16) 5 billion SCFD.</li> </ul>
	5. The Economic Coordination Committee of the Cabinet has approved policy directives that LNG will be provided to consumers who pay its full cost through the tariff.	
6. CPPA's Memorandum and Articles of Association amended to establish CPPA as an agent to purchase electricity on behalf of distribution companies (including Discos); and CPPA and Genco Holding Company endorse Heads of Agreement reflecting key principles for Power Purchase Agreements (PPAs) for existing thermal plants, with energy price based on heat rate testing.	6. (i) CPPA (G) has demonstrated operational capability to handle all steps in the billing and settlement cycle of electricity sales by Generators and purchases by Discos; and (ii) NEPRA has granted an amendment to NTDC license to eliminate CPPA functions.	<p><i>Result Indicator B3: Separation of market operations and transmission system operations.</i></p> <ul style="list-style-type: none"> <li>• Baseline: (FY12/ 13) Market and system operations in single entity (NTDC/CPPA).</li> <li>• Target: (FY15/16) All contracted power generated by IPPs, GENCOs and WAPDA Hydel traded through an independent CPPA (G) acting on behalf of Discos.</li> </ul>
<b>Policy Area C: Ensuring Accountability and Transparency</b>		
7. NTDC implements web-based open access to operational information, including merit order, and daily payment instruction to generators.	7. CPPA (G) publicly disclosed on its website the monthly amounts due, and payments made, by each Disco to CPPA (G), and by CPPA (G) to Generators, including arrears.	<p><i>Result Indicator C1: Disco performance reports and NEPRA review published.</i></p> <ul style="list-style-type: none"> <li>• Baseline (FY12/13) zero.</li> <li>• Target reports and review published.</li> </ul>
8. Each Disco (i) includes subsidy amount in customer's bills; and (ii) publishes on its website monthly billing and collection data aggregated by consumer category.	8. NEPRA has disclosed the annual Discos' performance and evaluation report, and has initiated outreach action to consumers on the content thereof; and Discos have disclosed on their respective websites their annual performance reports, including their plans to improve service delivery.	

Prior Actions DPC 1	Prior Actions DPC 2	Results
<p>9. ECC approves establishment of monitoring units within both MWP and MPNR with responsibilities for monitoring the energy sector, reporting on a quarterly basis; and MWP and MPNR formulate the scope of work for advisors who will review the quarterly monitoring reports and make those reviews public.</p>		

## Comparison of Pakistan Power Sector Reform DPC1 Triggers and Prior Actions

Indicative triggers in DPC 1 for DPC2	Prior Actions DPC 2	Rationale
<b>Policy Area A: Reducing Subsidies and Improving Tariff Policy</b>		
1. Following the mechanism in 2014 Tariff and Subsidy Policy Guidelines, MWP informs NEPRA of the FY14/15 budgeted subsidy to incorporate in the tariff determination of each Disco, to apply in FY14/15 expected to result in electricity subsidies to be reduced to 0.7% of GDP.	1. Following the mechanism in 2014 Tariff and Subsidy Policy Guidelines, MWP has informed NEPRA of the FY14/15 subsidies by consumer category to incorporate in the tariff determination of each Disco, to apply in FY14/15 expected to result in electricity subsidies to be reduced to 0.8% of GDP.	Minor change to accommodate way notification is done. Based on NEPRA determination in March 2015 the subsidy amount was 0.7% of forecasts. By the time of notification in June 2015 changed consumer mix and slightly lower GDP resulted in an increase to 0.8%.
2. Further to Prior Action 3 of DPC 1: (i) NEPRA issues guidelines for Disco tariff determination covering principles, methodologies, timetable, formula and procedures for both annual and multi-year tariff (MYT); and (ii) MWP publishes in its website a cap for total overdue payables to power generators not to exceed [PKR 220 billion]; and (iii) overdue payables to power generators are below the cap for at least [3] months.	2. MWP has published in its website a cap for total overdue payables to power generators not to exceed PKR 314 billion and a plan to reduce the flow of new overdue payables to 39 billion by FY17/18, with interim targets for the flows of PKR 92 billion in FY15/16 and PKR 57 billion in FY16/17.	Tariff determination guidelines have been issued by NEPRA and are in use. This action was simplified to focus on key action in the original trigger, namely the cap on circular debt and strengthened by an action plan to phase it out, which government has now published and is monitored as part of the IMF program.
	3. The Government has implemented a mechanism based on tariff surcharges and Tariff Rationalization Fund to maintain national uniform tariffs in Discos while ensuring cost recovery.	This action was included to give credit for an important structural reform that shifts the cost from the national uniform tariff on to the electricity consumer, done at a time to take advantage of falling oil prices.
<b>Policy Area B: Improving Sector Performance and Opening the Market to Private Participation</b>		
3. Each Disco identifies and assesses existing consumer receivables and their respective recoverability to reflect, in accordance with the Companies Ordinance and the General Accounting Practices, re-classification and provisioning of the qualified receivables in its audited financial statements for fiscal year ended 30 June 2014.		This action was completed satisfactorily and the accounts reflect the change. The government's emphasis on privatization requires a more effort on Disco accounts.

Indicative triggers in DPC 1 for DPC2	Prior Actions DPC 2	Rationale
4. MPNR notifies rules for enhancing gas production from producing, dormant or under-producing concessions.	4. MPNR has signed supplemental agreements agreeing revised prices for 92 exploration concessions and production leases at the levels set out in the 2012 Petroleum Policy, including 26 with the private sector.	The replacement action addresses a long-outstanding issue of greater concern to gas exploration and production companies and is expected to increase domestic gas production more rapidly.
	5. The Economic Coordination Committee of the Cabinet has approved policy directives that LNG will be provided to consumers who pay its full cost through the tariff.	This new action was introduced in response to the plan to import significant quantities of LNG. Supports adoption of a sound policy that will improve investor confidence and avoid risk of gas being diverted to segments where costs cannot be recovered.
5. (i) NTDC files request and NEPRA amends NTDC license to remove CPPA functions and NTDC's authority to purchase or sell electricity; and (ii) CPPA signs an energy supply agreement with each Disco to procure power on its behalf.  6. (i) CPPA signs on behalf of Discos PPA with WAPDA Hydel for existing plant and PPAs with all Gencos, one PPA for each existing operational thermal plant of Gencos; and (ii) WAPDA enters into agreement with CPPA for administration of current PPAs of IPPs under 1994 policy.	6. (i) CPPA (G) has demonstrated operational capability to handle all steps in the billing and settlement cycle of electricity sales by Generators and purchases by Discos; and (ii) NEPRA has granted an amendment to NTDC license to eliminate CPPA functions.	Focuses on the outcome of the original two triggers rather than processes leading to it, and reduces the risk of reverse.
<b>Policy Area C: Ensuring Accountability and Transparency</b>		
7. CPPA implements web-based access to monthly amount due and payment by each Disco including arrears, to CPPA and by CPPA to generators.	7. CPPA (G) publicly disclosed on its website the monthly amounts due, and payments made, by each Disco to CPPA (G), and by CPPA (G) to Generators, including arrears.	Largely rewording, but introduces public access to information and supports transparency for privatization.
8. MWP implements public web-based access to monthly results of performance contracts signed with Discos, NTDC and Gencos.  9. NEPRA publishes at least monthly on its website, information provided by all licensees on selected performance standards results and indicators.	8. NEPRA has disclosed the annual Discos' performance and evaluation report, and has initiated outreach action to consumers on the content thereof; and Discos have disclosed on their respective websites their annual performance reports, including their plans to improve service delivery.	Combines the two triggers and focuses on monitoring of licensing through regulator rather than management by MWP. Builds consumer awareness of comparative Disco performance.

## ANNEX 2: Letter of Development Policy



**Senator Mohammad Ishaq Dar**  
Minister for Finance, Revenue,  
Economic Affairs, Statistics and  
Privatization

No. 1(4)EFC/2014

**ISLAMABAD**  
8<sup>th</sup> October, 2015

Dear President Kim,

The government continues to pursue its long term strategy to restore macro-economic stability to Pakistan and improve its economic growth. This foundation of the government's effort has begun to bear fruit and we wish to maintain the momentum of the programme especially with respect to:

- Fiscal consolidation and stability;
- Rebuilding foreign exchange reserves; and
- Structural reforms.

Our efforts in the energy sector remain central to this programme, and its reform will directly impact the overall economic growth of Pakistan. Through this letter we wish to inform you of the progress of the Government of Pakistan's energy sector reform programme and our plans for the future. Our focus has been the development of a credible and actionable programme which can be supported over the medium term by the Asian Development Bank (ADB), the World Bank (WB) and the Government of Japan acting through the Japan International Cooperation Agency (JICA).

### **I. RECENT DEVELOPMENTS**

We inherited severe economic imbalances and vulnerabilities in May 2013. In the previous five years, economic growth had averaged 3 percent, well below potential and about half its average of past decades, and inflation was running at about 11.8 percent. By end-June 2013, State Bank of Pakistan's (SBP's) international reserves had dropped to around 1.5 months of imports; investment to GDP ratio had fallen to 15.0 percent; tax to GDP ratio had declined to 9.8 percent while the fiscal deficit was 8.8 percent of GDP. Public debt was well above the 60 percent advised by Pakistani legislation, with some international analysts even suggesting Pakistan would default.

Our democratic transition in May 2013 went a long way to support the implementation of effective measures to address Pakistan's challenging economic situation. As a result of our reform efforts and initiatives, we have been able to make considerable progress in restoring macroeconomic stability. During the fiscal year ending June 30, 2015 (FY15), growth continued to pick up and reached 4.24 percent.

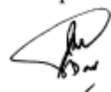
Favoured by low international oil prices, inflation ended last year at 4.53 percent; the fiscal deficit was contained at 5.37 percent; public debt declined; and the external current account deficit was below one percent, while international reserves stood at 3.4 months of imports in June 2015.

The results that have been achieved include:

- Pakistan has successfully completed eight reviews under the \$6.64 billion Extended Fund Facility (EFF) Program of the International Monetary Fund.
- Pakistan successfully re-entered international capital markets after an absence of seven years by issuing Euro Bonds worth \$2 billion and issued Islamic paper, Sukuk, for \$ 1 billion. Recently, Pakistan has successfully issued Euro Bonds worth \$500 million in difficult market conditions.
- We have resumed the privatisation programme, and have already divested the shares of United Bank Limited (about \$400 million), Pakistan Petroleum Limited (subscription of PKR 30 billion, the highest in our stock market's history) and Habib Bank Limited, raising over \$ 1 billion (the largest ever equity offering in an Asian frontier market). We have also completed the first strategic sale, of 88% percent of the shares in National Power Construction Company, raising \$ 25 million.
- We have auctioned 3G-4G spectrum licenses. Against the target of PKR 50-79 billion set during the last five years, we aimed to raise PKR 120 billion from auctions in our government's first full financial year, FY14, and our target was achieved.
- Moody's and Standard and Poor's (S&P) have both raised their outlook on Pakistan's dollar bond from stable to positive. Likewise, Fitch also rated Pakistan for the first time and assigned a rating of B, which is a notch higher than the equivalent rating of S&P and Moody's.

We are improving tax compliance and enforcement to bring more people into the net and also broadening the coverage of other taxes, including General Sales Tax. We have circumscribed the Federal Board of Revenue and government's ability to issue Statutory Regulatory Orders (SROs) to grant tax exemptions and concessions. We are also collaborating closely with the provinces to ensure their contribution to improved fiscal management. We have curtailed government borrowing from SBP and remain within targets agreed with IMF and, as noted above, have diversified our financing in the domestic and international financial markets.

Pakistan's electricity sector, which is a pivotal contributor to the overall economic situation, was facing a severe crisis in June 2013. Despite tariff increases revenues were still falling short of costs, and the Government subsidized electricity to the tune of about 1.8 percent of GDP in FY13. Chronic electricity shortages, peaking at an estimated level of over 7,000MW in 2013 contributed to reduced economic output. The circular debt had reached PKR 503 billion in mid-2013. The underlying cause of this problem was, and to a large extent remains, our over-dependence on the expensive imported heavy fuel oil



and diesel used for generation. Additional factors that affected the availability of electricity for consumption were high levels of losses and theft, and poor equipment maintenance.

In the past two years we have overseen significant improvements in the financial and technical performance of the electricity sector. By virtue of significant tariff increases in August and October 2013, subsidies were substantially reduced for industrial, commercial and bulk consumers and households using more than 300 kilowatt hours (kWh) per month. With the introduction of surcharges aimed at recovering some costs disallowed from the tariff, we further reduced subsidies in FY15 to 0.8 percent of GDP. We introduced performance contracts for the Boards and management of the distribution companies (Discos) and enforced the targets contained in them. At the end of FY15, losses had stabilized at around 18.7 percent, and collections had edged up to 89.2 percent. We have enforced merit order dispatch of power generation plants, pushing down the cost of generation and the increased generation thus enabled, plus new plant additions, means that we have been able to keep up with demand growth: last year the average daily shortfall was 2,900MW compared with 3,800MW in FY14 and 4,000MW in the year before that. This has allowed us to reduce load shedding to six hours in urban areas and eight in rural areas, while also supplying more electricity to industry.

There is still more to do. Technical losses and theft remain higher than acceptable. The circular debt has re-emerged despite our payment of PKR 480 billion in June and July 2013, because revenues from sales to consumers and subsidies from government do not cover the full cost of supply. Load shedding needs to be further brought down by making sufficient inroads into the generation deficit and strengthening transmission system. We continue to bring significant additional finance from private and public sources to support the much-needed investment in electricity infrastructure that will improve supply and bring down costs.

## **II. OUR PROGRAMME**

Let me start this section on our programme by reiterating the basic tenets of our government's vision for Pakistan. First, we want to build an economy that is not dependent on others except through trade and investment, and based on competitive advantage and market considerations. This can only be achieved with rapid and sustained growth. Second, the private sector has to be the lynchpin of economic activity. Third, the only areas where the government's presence in economic affairs can be justified are where investments are too large or too risky for the private sector to undertake, or where markets are unlikely to function, or both. Fourth, everyone must share the burdens of revenue mobilization and enjoy the benefits of reforms. The distortive and inequitable culture of exemptions and concessions must end, and provinces should also be encouraged to participate in this effort. Fifth, government must limit itself to the resources available, aiming for their efficient use and respecting fiscal discipline. Last, we must protect the poor and vulnerable with an accessible and reliable social safety net.





## **A. Macroeconomic Stabilization**

Pakistan was unfortunately unable to introduce structural reforms for macroeconomic stability and growth during the last one decade, which led to macroeconomic instability when the present government took office. However, since the government took office in June 2013, we have introduced a number of deep-rooted and comprehensive structural reforms and undertaken numerous stabilization measures while protecting vulnerable segments of the society. As a result, Pakistan not only averted the predicted default but is now firmly on the path of stability and growth.

Improvements in Pakistan's economy are manifested by an overall improvement in macroeconomic indicators. In FY14, Pakistan achieved, as mentioned above, GDP growth of 4.02 percent - the highest in six years - and increased it further to 4.24 percent in FY15, reaching the highest level in seven years. The fiscal deficit which stood at 8.2 percent (8.8 percent when the government took office) at the end of FY13 has been brought down to 5.37 percent in FY15. There has also been a significant increase in Pakistan's foreign exchange reserves in the past 18 months. Having touched the predicted low level of less than \$8 billion in February 2014, Pakistan's reserves have continued to grow due to our serious efforts and have now reached the record level of over \$20 billion. Positive macroeconomic performance has resulted in a soaring stock market and increased investment.

Going forward, we will continue to make serious efforts to further consolidate the macroeconomic gains. As committed under the IMF EFF programme, our monetary and exchange rate policies will continue to reduce external vulnerabilities by building foreign exchange reserves. We will maintain a prudent monetary stance, to meet continued expectations of low inflation. Improving monetary operations will help make our policy tools more effective, including enhancing SBP independence.

In this present fiscal year, FY16, we strive for 5.5 percent growth. The current account deficit is expected to narrow to about 0.5 percent of GDP, and inflation is expected to stay contained at under six percent. We continue to work to improve tax collection and aim to achieve a tax to GDP ratio of 12.0 percent this year. We are working to strengthen financial stability through various measures including the introduction of deposit protection, introduction of improved capital and liquidity standards in banks and by strengthening regulatory powers. Our privatisation programme will further build our reserves, with a particular concentration on strategic sales of electricity generation and distribution companies, scheduled for FY16 and beyond.

The banking sector remains sound, and we are committed to ensuring financial stability. We are introducing deposit insurance and strengthening measures to prevent money laundering and the financing of terrorism. We are reinforcing the regulatory and supervisory framework through a strong legislative agenda that will see the introduction of a Securities Bill, the Securities and Exchange Commission of Pakistan Act and a Futures Trading Bill as well as



improvements to existing legislation to help improve recovery of non-performing loans.

The energy sector, by virtue of its influence on Pakistan's economic performance, has been identified as one which can significantly affect macroeconomic stability and fiscal performance. Our plans for the sector are discussed further in subsequent sections.

### **B. The Government's Vision and Objectives for the Energy Sector**

In July 2013, within three months of taking office, we announced a National Power Policy, 2013.

The key goals and targets envisioned under the Policy include:

Goals	<p>To enhance generation capacity in a sustainable manner</p> <p>Promote and ensure a culture of conservation and responsibility</p> <p>Ensure affordable electricity, based (where possible) on indigenous fuels</p> <p>Minimize losses (technical, financial) and inefficiency</p> <p>Control pilferage and theft, and</p> <p>Align the sector ministries, provincial and federal authorities, regulators, and implementing entities, to coordinate activities, and strengthen governance</p>
Targets – to be achieved by 2017	<p>Decrease/eliminate the demand/supply gap – 4500 - 5000 MW today to 0 by end 2017</p> <p>Decrease weighted average generation cost from about USc 12/kWh today, to below 10 USc per kWh</p> <p>Reduce transmission and distribution losses from 23-25% today to about 16%</p> <p>Increase collection rates from 85% (system wide) to above 95%, and</p> <p>Reduce decision times for the Government, related departments, regulators, etc.</p>

In September 2013, the Government prepared a detailed plan aimed at turning this vision into an actionable programme. Subsequently, the programme was discussed with stakeholders, including the private sector, academia and civil society, donor agencies, the utility providers, and bilateral governments, and their respective role in support of the programme was identified, i.e.

- Supporting the implementation of the Government's policies;
- Ensuring that public sector counterparts and utilities meet their obligations for various projects and programmes; and
- Enabling the Government to monitor the progress in achieving the objectives and targets set out in the Government's policies, and take corrective actions where required.

The proposed policy actions, and for which we seek support from WB, JICA, and ADB, are discussed in more detail below.

### **C. Structural Reform of the Energy Sector**

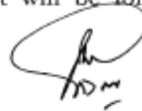
We attribute the positive results in the sector that we have described above in large part to the reform programme which was supported under the first phase of programme lending approved in April and May 2014. We wish to maintain this program and look to the continued support of the three institutions (WB, ADB and JICA) through the proposed second phase of programme lending. In this next phase, the reform programme is aimed at continuing to improve the financial viability of the power sector but also in bringing about lasting structural reform that will encourage improved service and additional investment. It involves a three pronged strategy, i.e.

- To manage better tariffs and subsidies;
- To improve sector performance and open the market to private participation; and
- To improve the transparency and accountability of sector institutions.

#### ***Managing Tariffs and Subsidies***

We decreased government subsidies for electricity consumption from 1.8 percent of GDP in FY13 to 1.3 percent in FY14 and to 0.8 percent in FY15, slightly above our original target of 0.7 percent. Subsidies remain now only for households which use less than 300 kWh/month, certain classes of consumers including those in Federally Administered Tribal Areas (FATA), Balochistan and some bulk power consumers. We have also eliminated the subsidy mechanism that was used to finance the uniform tariff policy through the introduction of a surcharge as permitted under the Regulation of Electricity Generation, Transmission and Distribution Act of 1997. The government's right to raise surcharges has been challenged in the Courts, but we are confident that we will be able to continue to raise surcharges in the future. We will further reduce subsidies to the electricity sector to 0.4 percent in FY16, as committed to in the IMF programme. We will also take steps to ensure that the remaining subsidies are focused on the poor.

Following the policy issued by government in early 2014, the National Electric Power Regulatory Authority (NEPRA) introduced guidelines for determination of tariffs which sets out the methodology and timetable for the introduction of multiyear tariffs (MYTs). We will stage the introduction of MYTs for all Discos over the coming three years. Because MYTs are a pre-requisite for their privatisation, we are taking steps to ensure that those Discos which are at the top of the government's list submit MYT petitions as soon as possible. Faisalabad and Peshawar Electric Supply Companies (FESCO and PESCO respectively) have already done so, and NEPRA has held its hearing for the FESCO petition. Islamabad and Lahore Electric Supply Companies (IESCO and LESCO respectively) will submit [five year] MYTs in FY16. The MYT will bring stability to tariff determination and in the five year tariff period, adjustment will be formula-based and therefore much quicker.



Despite our efforts to improve financial viability of the Discos, there is still a shortfall between the combination of revenues from sales to consumers and subsidies provided by the government on the one hand, and the cost of running the system on the other. The shortfall gives rise to the circular debt and is caused by a number of factors, including:

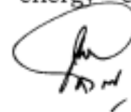
- Sector inefficiencies arising from Discos having higher levels of losses and lower levels of collections than those allowed by the Regulator;
- Discrepancies in the tariff regime that does not recognize some costs, including the cost of delays in determination of new tariffs;
- Some costs are imposed on the Discos by virtue of government policy, including subsidies, and failure by Federal and Provincial government departments to pay their bills.

In consequence, the circular debt – defined as the aggregate amount of payables owed by the Discos on the last day of any given month – started to re-emerge from August 2013. It had reached PKR 314 billion at the end of FY15, and experience indicates that beyond this level the ability of the sector to produce electricity is reduced. We have, therefore, imposed a cap on the circular debt and prepared a plan to manage it, which we have published on the Ministry of Water and Power web site. The three-year plan has been endorsed by the Economic Committee of the Cabinet (ECC) which will also monitor it, and publish the findings of the monitoring. The plan and our monitoring is also an important part of maintaining our commitment to IMF under the EFF programme.

Our circular debt management plan is fully funded to allow the reduction of the flows to PKR 39 billion by the end of FY18, and to manage the stock from its current level down to PKR 212 billion by the same date. In addition, we have also introduced a surcharge to cover the cost of servicing historic circular debt held in the Power Holding Company which currently amounts to PKR 335 billion. We rely on privatization proceeds to reduce the stocks of both current and historic circular debt. We will monitor the progress of the plan and provide support as required to cover the costs of the management plan throughout the remainder of this Parliament.

***Improving Sector Performance and Opening the Market to Private Participation***

We have identified three areas of action on which our program efforts will focus to improve the performance of the sector. The first is to address efficiency of machinery and appliances, on both the supply and the demand side, and thus ensure we extract maximum value from our investments in the electricity sector. To that end, after approval from the Council of Common Interest (CCI), we have placed the Energy Efficiency and Conservation Bill before Parliament and expect it to become law in early 2016. We have issued the guidelines on minimum energy performance standards, and energy labelling requirements for three consumption intensive appliances and in the near future we will introduce a fiscal incentive to promote energy efficiency and conservation.

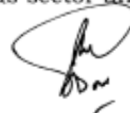


On the supply side, the lack of focus on selection of least cost generation projects, and the failure to optimize generation and transmission investments has contributed toward the high cost of supply. We are well advanced in the preparation of a generation and transmission long-term least-cost plan to ensure that only those projects are considered for implementation which take into account considerations of location, fuel choice, and economic cost of power to be produced over the lifetime of the project, as well as making explicit social, environmental and other associated safeguard costs. We will ensure that least-cost plan is submitted to NEPRA during FY16. Thereafter we will ensure rigorous implementation of the plan and will not finance in the public sector, or approve investments by the private sector that does not feature in the least cost plan. We will also adhere to the retirement schedule in the plan, so that old and inefficient plants are taken out of service and replaced with modern, efficient and reliable plants.

The second area where we are focusing our efforts is in the gas sector. We recognize the importance of natural gas to the power sector as well as to other key industries. Domestically-produced gas is a readily-available, comparatively inexpensive and environmentally-friendly fuel for electricity generators. We are making efforts to ensure that exploration and production of gas in Pakistan has adequate incentives, and have awarded 46 new concessions for exploration and production of domestic gas in August 2013. Simultaneously, we adopted a model supplementary agreement that gives better prices to existing concessions. Since completing the DPC prior action in June 2015, we have converted a further two gas concessions bringing the total to 94 existing agreements of 120 that applied and were eligible for the new prices under the 2012 Petroleum Policy. In the coming year we will start amendments to the concession agreements to provide 2012 policy prices to incremental gas produced from existing concessions. In the medium term we will review the results achieved under the 2012 policy with a view to making the domestic gas sector more attractive to private capital.

To supplement our domestic supplies, we started importing liquefied natural gas (LNG) in April 2015 and have adopted a policy of cost recovery in the gas sector. We have defined those consumers who are eligible to receive LNG, namely power generation, bulk consumers, fertilizer production and compressed natural gas, since these are the ones that are able to extract the maximum economic value from gas. We have also mandated that these users of LNG will pay the full cost of the gas. No LNG will be added to the pool of domestic production and no consumer which does not pay the full cost of LNG will be supplied it.

In the medium term we intend to move towards a more market-oriented gas sector and away from the administrative allocations of gas and controlled pricing of today. This will be essential if we are to be able to attract further imports, whether via LNG or pipeline from our neighbours. As a first step in this direction, we have started a review of the structure of the middle and downstream gas sector and will adopt a



restructuring plan in FY16. With the restructuring plan we will also prepare for the privatization of the gas distribution segment.

It is to the third area of power sector reform that we have devoted our largest effort and achieved the most significant change. We are poised for a significant transition, which has evaded previous governments for the past 15 years. We have set up the Central Power Purchasing Agency Guarantee (CPPA-G) independent from NTDC. Although initially CPPA-G will act as an agent of Discos, it is intended to develop competitive markets following policies set by government and requirements set by NEPRA. To make CPPA-G operational, NEPRA has approved the modification of NTDC license so that it can no longer buy or sell power. The Market Operator Registration Standards and Procedures Rules have been notified. CPPA-G has prepared a Commercial Code which has been approved by NEPRA and has put in place standard operating procedures that will allow billing and settlement. CPPA-G is charged with market development and as a first step will implement the market for direct contracting between electricity generators and bulk power consumers.

On behalf of the Discos, CPPA-G has signed PPAs with the Gencos. The power purchase agreements (PPAs) with the independent power producers (IPPs) whose agreements fall under the 2002 Power Policy remain to be novated from NTDC to CPPA-G and a new PPA has yet to be agreed between WAPDA Hydel and CPPA-G. We are committed to completing these actions in line with the legally-binding Economic Coordination Committee of the Cabinet's decision of September 4th, 2015 which provides for a transition period after the signing of the Business Transfer Agreement of two years for the 2002 Power Policy IPPs and six months for the WAPDA Hydel PPA. Thereafter we will be in a position to implement the bulk supply market.

In parallel, we are also pressing ahead with the privatisation of the publicly owned Discos and thermal generation companies (Gencos). Privatisation is a key part of our strategy to limit the government's financial liabilities in the electric power sector, including to address the stock of circular debt, and to improve technical performance. Consequently we are working to privatise Discos and Gencos, and have developed a plan to sequence the capital market and pre-privatisation restructuring for these firms. We have already recruited financial advisors for all companies and we expect to close the first transaction within FY16 and expect to complete the privatization of all Discos and Gencos within the term of the current government.

We recognize that during the remaining period in public ownership, and to make the power companies more attractive, we have introduced performance driven contracts for the public sector utilities, signed by the Board and management of each company and Ministry of Water and Power. The Discos are being instructed to implement the requirements of the Companies' Ordinance 1984. We have introduced a mechanism to monitor the utilities' performance under these contracts with reporting to the Economic Coordination Committee of the Cabinet on performance. NEPRA has signalled its intention to ensure implementation and compliance with the Grid Code.



### ***Improving Accountability and Transparency***

The status of follow up actions under the Petroleum Exploration and Production Policy 2012 actions under the National Power Policy, 2013 are being monitored regularly by the ECC of the Federal Cabinet. Review at the highest level demonstrates the importance which the government attaches to implementing the energy sector reform plan.

We have established a mechanism for quarterly monitoring of the power and petroleum policies set out in this letter. We have established monitoring units in Ministry of Water and Power and Ministry of Petroleum and Natural Resources charged with monitoring of the progress of the reforms, reporting to the ECC on a quarterly basis, and disseminating energy sector information to the public. We will also hire monitoring consultants to work with the units in MWP and MPNR through donor funding. We will ensure reporting of the results through web-based forums which allow all stakeholders (including citizens) to review progress and contribute their views. The proposed culture of monitoring and transparency will also require enhanced regulatory capacity, for which, bilateral/multilateral assistance is also being sought. As a first step we have appointed a new Chairman of NEPRA and a Member with financial skills. We will also establish a government-wide communications program, and will seek assistance from our partners to help in its establishment.

Further measures to promote transparency, some of which have already been initiated, will increase access to information in the energy sector through implementing web-based access to operational information on electricity generation, including the merit order dispatch. We have also publicly made available on the CPPA-G website the monthly amounts due and payments made by Discos and to generators.

We will implement public web-based information about the performance of Discos, Gencos and NTDC against the benchmarks set in their contracts. NEPRA has published its review of the performance of Discos on its website; Discos have published their own annual performance reports on their websites. We will further strengthen the two monitoring units at MWP and MPNR and upgrade their outreach capacity to move beyond passive publication and towards a more proactive approach to communications with the public. We are strongly committed to ensuring that all the information we publish is kept up to date: quarterly reports will be available within one month of the end of the quarter, and annual reports within six months of the end of the year.

### **III. GOVERNMENT COMMITMENT**

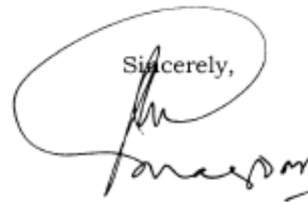
We take this opportunity to reiterate our commitment to reforms and dealing with the policy issues. We have already taken some difficult decisions including substantial tariff increases and the settlement to the power sector circular debt which are already yielding positive results. We are committed to continue to make the necessary decisions to improve the power sector's financial viability.



You will appreciate that the measures described above to reform the energy sector constitute the strongest efforts yet undertaken for many years. Notwithstanding, we recognize that bringing the energy sector back on track requires continued efforts. The government's plan to deal with the structural impediments to the performance of the energy sector is matched by our commitment for improving the quantity and quality of physical investment in the sector, wherever possible with private sector investment participation.

In closing, we would like to express our continued appreciation of ADB, JICA and the World Bank for working with the government in the development of a single programme for the energy sector that is closely integrated with that of the IMF. We look forward to continuing to work closely with your institutions in our common purpose of improving Pakistan's economic prospects.

Kind regards,

Sincerely,  


Dr. Jim Yong Kim,  
President,  
The World Bank,  
Washington.



### **ANNEX 3: Fund Relations**

#### ***IMF Executive Board Completes Eighth Review under the EFF for Pakistan***

***Press Release 15/443***

***September 29, 2015***

The Executive Board of the International Monetary Fund (IMF) on September 28, 2015 completed the eighth review of Pakistan's economic performance under a 36-month program supported by an Extended Fund Facility (EFF) arrangement. The Executive Board's decision enables the immediate disbursement of an amount equivalent to SDR 360 million (about US\$504.8 million), bringing total disbursements to SDR 3.24 billion (about US\$4.54 billion).

On September 4, 2013, the Executive Board approved the three-year extended arrangement under the EFF in the amount of SDR 4.393 billion (about US\$6.64 billion at the time of approval of the arrangement, or 425 percent of Pakistan's quota at the IMF). (See Press Release No. 13/322).

In completing the review, the Executive Board also approved the authorities' request for waivers of non-observance of the end-June 2015 performance criteria on the ceiling on overall budget deficit and the ceiling on net government budget borrowing from the State Bank of Pakistan (SBP), as well as modification to adjust the end-September 2015 performance criterion on net domestic assets of the SBP target.

Following the Executive Board discussion on Pakistan, Mr. Mitsuhiro Furusawa, Deputy Managing Director and Acting Chair, said:

“Economic activity is picking up pace and vulnerabilities are gradually receding. Continued prudent policies and reform efforts are necessary to lock in the gains so far in macroeconomic stability and reinforce the foundation for sustained high growth.

“The authorities' commitment to strengthening Pakistan's fiscal position is welcome. Further steps to increase revenue mobilization, including by broadening the tax base and strengthening tax administration, remain key to generating resources for priority spending and greater social protection. Strengthening coordination with the provinces will also help safeguard fiscal discipline.

“Foreign exchange reserves have continued to increase, benefitting from windfalls from lower import prices. Additional efforts are needed to further strengthen external buffers. The central bank's new interest rate corridor represents a major step to improve the monetary policy framework which would further benefit from greater central bank autonomy. In this regard, an early adoption of pending legislation would bolster governance and the credibility of monetary policy. Beyond this, further progress is also needed to address the remaining recommendations of the 2013 Safeguards Assessment report.

“Progress with bank capitalization and efforts to facilitate foreclosures and corporate restructuring are bolstering financial stability. Further strengthening Pakistan's regime against

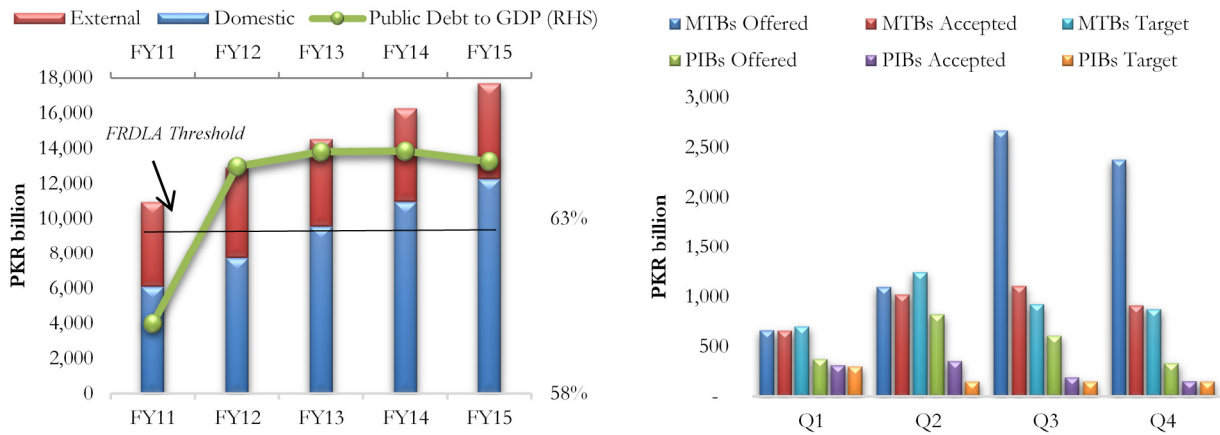
money laundering and the financing of terrorism remains an important policy priority for the authorities.

“The momentum of structural reform must be maintained to achieve high and durable growth over the medium term. In particular, reforms should aim at securing a reliable supply of electricity and gas, and reducing fiscal risks posed by these sectors. An accelerated pace of privatization and restructuring of public enterprises as well as regulatory reform will also go a long way toward improving the business climate and supporting private sector-led activity.”

## ANNEX 4: Debt Sustainability Analysis

4.1. **Overview: Public debt dynamics have started to ease.** Over the last five years, public debt to GDP has been above the 60 percent limit set by the Fiscal Responsibility and Debt Limitation Act 2005<sup>7</sup>. As of end-June 2015, total public debt stood at 64.6 percent of GDP<sup>8</sup> as compared with the June 30, 2014 stock position of 64.9 percent (see Figure 4.1 left hand chart). In terms of its composition, domestic debt dominated the stock in line with the past trend. In fact, foreign currency public debt declined by 1.3 percentage points during the year and closed FY14/15 at 19.1 percent of GDP despite healthy IFI disbursements, a continued IMF program and successful launch of an international Sukuk. This is primarily due to translational gain<sup>9</sup> observed during most of the fiscal year.

**Figure 4.1: Trends in Public Debt and Government Securities Auction Profile FY14/15**



Source: State Bank of Pakistan and staff calculations

Source: State Bank of Pakistan and staff calculations

4.2. **Domestic debt was created using both long-term and short-term funding avenues.** Government was able to retire some of its central bank borrowings thereby complying with the zero quarterly borrowing limit<sup>10</sup>. Domestic debt recorded an increase of PKR 1.3 trillion in the portfolio, thereby closing FY14/15 at PKR 12.3 trillion (or 44.8 percent of GDP). The year started with a continued interest in Pakistan Investment Bonds (PIBs)<sup>11</sup> facilitating the government to mop up proceeds comfortably above the pre-auction targets in the first half<sup>12</sup>. Market sentiment during the second half of FY2014/15 seemed to shift towards Market Treasury Bills (MTBs)<sup>13</sup> in view of policy rate cuts and as a result, the government started accepting offers over and above the targeted amount in this short-term paper; the main thrust of the market being in the 6-month and 12-month T-bills<sup>14</sup>. Nevertheless, scheduled banks' interest in PIBs, on top

<sup>7</sup> With the exception of 2010/11 when the public debt-to-GDP ratio touched 59.6 percent (close to 60 percent, nonetheless).

<sup>8</sup> The total public debt is still above the threshold of 60 percent stipulated under the Fiscal Responsibility & Debt Limitation Act 2005.

<sup>9</sup> Translational gain observed during FY2014/15 implies the appreciation of US dollar against major currencies. In Pakistan, external loans are contracted in various currencies but disbursements are effectively converted into PKR. As PKR is not an internationally traded currency, other currencies are bought and sold via selling and buying of USD. Hence, the currency exposure of foreign debt originates from two sources: USD/other foreign currencies and PKR/USD. This two pronged exchange rate risk is called translational gain/loss.

<sup>10</sup> Specified in the SBP (Amendment) Act, 1956.

<sup>11</sup> Pakistan Investment Bonds – the MLT market debt instrument – with maturity points of 3, 5, 7, 10, 15, 20 and 30-years.

<sup>12</sup> During Q2, on aggregate, acceptance of bids for PIBs was more than two times the auction target.

<sup>13</sup> Market Treasury Bills – the short-term financing instrument – available in three tenors: 3-months, 6-months & 12-months.

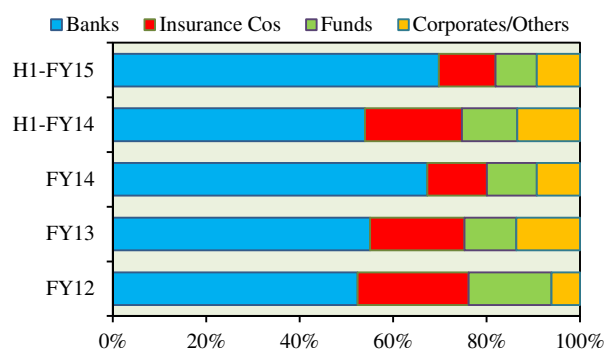
<sup>14</sup> Out of total acceptance in H2-FY2014/15, both constituted 41 percent share.

of MTBs, was intact in these last two quarters of FY14/15 and the government was equally receptive (see Figure 4.1 right hand chart). This interest of the banking industry points toward the financial sector’s preference in risk-free sovereign instruments rather than investing in riskier ventures such as the private sector

#### 4.3. Banks still remain the prime lender to the government.

During the first half of FY14/15, banks held 70 percent of the outstanding PIBs as opposed to a 54 percent share in July-December 2014 (Figure 4.2). The buildup of long-term liabilities on the banking sector’s financial statements against the short-term nature of their assets (bank deposits) point to a maturity risk currently underlying the domestic banking industry. Encouragingly, PIBs held by non-banks have increased by about 80 percent during July-December 2014 as compared in volume to the same period last year.

**Figure 4.2 : Bank and Non-Bank Holdings of Pakistan Investment Bonds**



Source: State Bank of Pakistan

**Table 4.1: DSA: Base case debt projections**  
(In percent of GDP, unless otherwise indicated)

	Actual			Projections				
	2012	2013	2014	2015	2016	2017	2018	2019
<b>Public sector debt 1/</b>	<b>64.5</b>	<b>64.8</b>	<b>64.3</b>	<b>63.0</b>	<b>62.4</b>	<b>61.3</b>	<b>59.8</b>	<b>58.7</b>
o/w foreign-curr. denominated 2/	26.0	22.0	20.9	19.9	20.1	19.9	19.8	20.0
<b>Key Macroeconomic and Fiscal Assumptions</b>								
Real GDP growth (in percent)	3.8	3.7	4.1	4.4	4.6	4.8	5.0	5.1
Inflation rate (in percent, period average)	11.0	7.4	8.6	5.5	5.0	5.0	5.0	5.0
Primary deficit 3/	4.0	3.6	0.1	0.0	-0.3	-0.6	-1.0	-1.0

Source: World Bank staff estimates

1/ General government gross debt

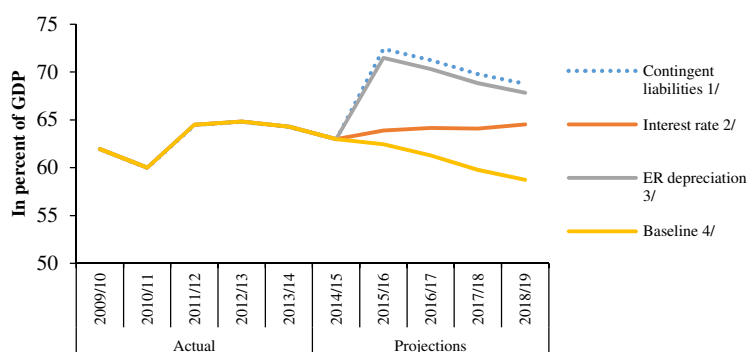
2/ This includes medium and long term PPG debt as well as short-term external debt. This also includes IMF debt (both budget support and balance of payments support), Foreign currency bonds as well as PSEs non-guaranteed debt.

3/ Includes grants. '-' means a surplus.

4.4. Debt Sustainability analyses: Under the baseline scenario, Pakistan’s public debt-to-GDP ratios are projected to decline over the medium term. With a targeted consolidated fiscal deficit (excluding grants) of 4.0 percent of GDP by FY18/19, public debt is projected to fall from 64.3 percent of GDP in FY13/14 to 58.7 percent by FY18/19 (Table 4.1). Moreover, gross financing needs are also expected to decline from 30 percent of GDP in FY13/14 to around 17 percent of GDP in FY18/19. Early fiscal consolidation reflecting adjustment measures deemed politically feasible – including subsidy reduction and tax policy and administration actions – and strong economic growth are expected to support a decline in public debt ratios.

4.5. Stress tests show that public debt is particularly sensitive to a contingent liabilities and real exchange rate depreciation shock. Stress tests show that the most important deterioration of public debt levels vis-à-vis the base case scenario takes place under a one-time contingent liability shock, a real depreciation shock and a real interest rate shock (Figure 4.3). In the most extreme case, a one-time contingent liabilities shock equivalent to 10 percent of GDP to the baseline, the debt stock rises to 68.8 percent of GDP by FY18/19, 10 percentage points of GDP above the baseline. A second important shock is a 30 percent one-time real depreciation as a result of which the public debt ratio rises to 67.8 percent of GDP by FY18/19; nine percentage points of GDP above the baseline.

**Figure 4.3 : Public Debt Sustainability Analysis**



Source: World Bank staff estimates  
 Notes: 1/ One time 10 percent of GDP increase in other debt creating flows in 2015/16  
 2/ Real interest rate is at baseline plus one standard deviation  
 3/ One time 30 percent real depreciation in 2015/16  
 4/ Country team projections

4.6. **Public debt will remain a source of fiscal vulnerability in the medium term.** First, despite the gradual and moderate decline in public debt ratios, total interest payments will continue to absorb a large share of fiscal revenues, averaging to 30 percent of total revenues. The public debt-to-revenue ratio during the projection period is projected to average around 395 percent, well above other countries in the region. Second, the emergence of the circular debt in the power sector, which is not reflected in the definition of public debt, presents a significant contingent liability for the government. Third, coming from a previous period of negative domestic real interest rates that somehow reduced public borrowing costs, the combination of a shift toward a higher share of domestic debt and positive real interest rates may actually prevent a faster fall in public debt ratios.

## **ANNEX 5: PSIA Methodology**

5.1. This annex describes the methodology and assumptions underlying the poverty and social impact analysis presented in the main text of this PD. In addition to the analysis presented in the PD, the PSIA team is producing a just-in-time policy note for peer review and circulation to the Government and other stakeholders. The assumptions for that note are still being finalized based on updated inputs from the Government on their plans.

5.2. The PSIA models the changes in electricity prices that likely will be required to meet the 0.4 percent of GDP subsidy target by 2016, agreed upon by the Government of Pakistan and the IMF in development of the IMF's Extended Fund Facility for Pakistan. It examines the impact of these changes on household welfare and on the benefits incidence of electricity subsidies over the reform horizon of FY13/14 through FY15/16.

5.3. The analytical framework developed for this analysis has three parts. First, it determines the expected increase in the cost of electricity supply and GDP for the three forecast years to FY2016, and calculate the increases in electricity prices that would be required to gradually lower electricity subsidies from 1.8 percent of GDP in FY12/13 to 0.4 percent of GDP in FY15/16. Second, these electricity price increases and the subsidy reduction path are used to develop reform scenario forecasts for growth, income and prices with a computable general equilibrium (CGE) model for Pakistan. Third, these forecasts are used to model the household-level welfare impacts and subsidy benefits incidence (share of total subsidies received by each income quintile) of different electricity pricing scenarios with the latest national household survey data.

5.4. In this PSIA, we analyze the impact of two mechanisms for protecting the poor from the negative impacts of subsidy reform. First, we examine modifications to the lifeline tariff; that is examined under the framework explained below for forming price increase assumptions and projecting their impact. Second, we examine the provision of cash transfers to poor households; the final section on cash compensation describes how we analyze the design and impact of these.

### **Electricity Cost and Price Assumptions**

5.5. The weighted average NEPRA-determined tariff (NDT which is NEPRA's calculation of the tariffs that would recover each utility's allowed revenue requirement) across all utilities in Pakistan is taken as the cost of electricity. Since the last forecasting round a year ago, the average cost has fallen substantially as the result of oil price cuts. For FY14/15 we use an average unit cost of PKR 12.31/kWh (compared with the forecast of PKR 14.75/kWh we used last year) while for FY15/16, provisional NDTs suggest the average cost will be PKR 10.33/kWh (compared with the forecast of PKR 15.54/kWh we used a year ago). Any changes in the NDTs will be driven by a combination of oil prices (60 percent weight) and overall inflation in Pakistan (40 percent weight). Oil prices are taken from staff estimates, and are forecast to tick up slightly to USD 65 per barrel on average in FY15/16. Inflation is taken from the IMF World Economic Outlook (April, 2014), augmented by the estimated marginal effect of electricity price changes taken from the CGE model. Overall inflation for the baseline is expected to pick up to 9 percent in FY14/15, before dropping to 7 percent in FY15/16. Inflation forecasts under the reform scenario are lower, as the result of expected substitution of industry towards more fuel efficient production.

5.6. Total electricity subsidies as a percent of GDP are calculated from the per-unit difference between the projected NDT for each consumer class and the electricity price charged to each consumer class multiplying that difference by the amount of electricity consumed by each consumer class. The sum of those amounts across consumer classes yields the total electricity subsidy needed, and division of that figure by GDP gives electricity subsidies as a fraction of GDP. This calculation implicitly assumes that electricity subsidies are defined as the payments the government needs to make to all of the utilities to compensate them for the difference between their allowed costs and their revenue from tariffs (this is the definition of the Tariff Differential Subsidy, or TDS).<sup>15</sup> To project consumption by consumer class, electricity consumption by each consumer class is assumed to increase at the same pace as GDP.

5.7. For electricity prices, we assume that the November 2014 notifications will stay in place through the end of FY14/15, but that the surcharge will not be imposed until the start of FY15/16. Given that the electricity cost is likely to increase significantly in FY14/15, the analysis assumes government will maintain electricity subsidies at 0.6 percent of GDP in FY14/15, then it will increase electricity prices sufficiently to reduce subsidies to below 0.4 percent of GDP in FY15/16.

5.8. The analysis assumes that the government will slightly reduce tariffs in FY15/16 for residential consumer slabs above the 200 kWh/month level, while slightly increasing those for agricultural, commercial and industrial consumers (Tables 5.1 and 5.2). This reduction is possible because of the considerable decline in the unit cost of electricity; however, it is important to note that tariffs would fall further if subsidies were not reduced. As mentioned earlier, we assume the surcharge will be imposed from FY15/16 onwards, slightly adding to tariffs on all residential consumers above 200 kWh/month.

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<sup>15</sup> If the IMF were to expand its definition of subsidies to also include, the clearance of circular debt then a larger electricity price increase than projected here would be required to bring total electricity subsidies down to 0.4 percent of GDP. That would magnify the impacts on the poor presented here and require larger mitigation measures to protect the poor.

**Table 5.1: Electricity Price Increases under Reform Scenario  
(Annual nominal increase)**

	FY13/14	FY14/15	FY15/16
<b>Residential</b>	22%	10%	7%
<b>Commercial</b>	37%	8%	-5%
<b>Industrial</b>	53%	7%	-5%
<b>Agriculture Tubewells</b>	31%	14%	-8%

**Table 5.2: Residential Electricity Tariffs under Basic Reform Scenario (PKR/kWh)<sup>16</sup>**

<b>Lifeline: Up to 50 kWh/month</b>	2.00	2.00	2.00
<b>1-100 kWh</b>	5.79	5.79	5.79
<b>101-200 kWh</b>	8.11	8.11	8.11
<b>101-300 kWh</b>	12.09	12.09	9.23
<b>301-700 kWh</b>	16.00	15.52	12.22
<b>700+ kWh</b>	18.00	17.60	13.75

### Macroeconomic Modeling and Assumptions

5.9. The Global Trade Analysis Project Computable General Equilibrium Energy Substitution (GTAP-E CGE) model is used to simulate the whole-economy impacts of the subsidy reduction path and price increases detailed above.<sup>17</sup> The outputs of the CGE model provide parameter settings for a partial-equilibrium model of household demand (described in the next section), which yields estimates of the welfare effects of the reforms and potential compensatory measures.

5.10. In the macroeconomic modeling stage, GTAP-E model simulations yield for FY13/14, FY14/15 and FY15/16 the household consumption, income growth and average price changes under the baseline and reform scenarios. The modeling exercise comprises two parts. First, a baseline using the built-in dataset for Pakistan in the GTAP-E model (version 8) was developed. Economic growth rates and other parameters for the baseline are taken from the IMF World Economic Outlook (WEO) database and other official forecasts. Second, a set of scenarios were developed based on the projected increases in consumer electricity prices and decreases in government subsidy expenditures described previously.

5.11. The model distinguishes electricity as a separate consumption item in the household budget. On the supply side, electricity is produced using three different types of energy (hydropower, natural gas and oil) that are either domestically produced or imported. The baseline is developed on the hypothesis that world oil prices (the main input used in electricity production in Pakistan) will decrease over the next three years.<sup>18</sup> The removal of subsidies is treated as an exogenous shock on producer and consumer prices. Each production sector and household is hit differently as a result of the removal of electricity subsidies (as described in

<sup>16</sup> From October 2013, residential tariffs (aside from the lifeline tariff) follow a “previous-block” structure, where households are charged two rates for their consumption: one rate for the final bracket they fall in for all consumption in that bracket, and the rate from the next lower bracket for all consumption below the cut-off for the final bracket. For example, a household consuming 750 kWh in one month in FY2015 would pay PKR 18 for its 701-750<sup>th</sup> kWh and PKR 16 for its 1<sup>st</sup> to 700<sup>th</sup> kWh.

<sup>17</sup> For this exercise, only the price increases in Table 4.1 were simulated.

<sup>18</sup>[http://www.worldbank.org/content/dam/Worldbank/GEP/GEP2014a/Commodity\\_Markets\\_Outlook\\_2014\\_January.pdf](http://www.worldbank.org/content/dam/Worldbank/GEP/GEP2014a/Commodity_Markets_Outlook_2014_January.pdf)



Table 5.1). On the production side, the CGE model describes the pass-through effect of subsidy removal in terms of possible increases of producer prices, which is likely to result in an increase in the average price level. Simultaneously, favorable trends in the world oil market predicted for FY13/14 and FY14/15 will help to attenuate the inflationary impact of subsidy removal. Energy intensive sectors are predicted to be the most affected by rising electricity prices. On the consumer side, two effects are predicted. The Pakistan economy will perform better under the IMF program; faster growth would result in increased income levels (both for skilled and unskilled labor) in the medium term.

### Household-level Modeling and Assumptions

5.12. The outputs from the macroeconomic modeling in a partial-equilibrium model are based on the FY10/11 Pakistan Social and Living Standards Measurement Survey (PSLM) data. The model takes FY2010/11 actual electricity consumption and projects it forward to FY2013 based on consumption growth, inflation and changes in electricity tariffs. No demographic or technological changes are assumed over that time and that total household consumption grows uniformly at the rate predicted by the CGE model. There is allowance for each household's electricity demand to evolve over time based on income and price growth rates and associated demand elasticities. From FY13/14 to FY15/16 electricity consumption and total household consumption is forecast under the baseline and reform scenarios. A cost of living index is calculated for each household based on the cost of food, non-food and electricity expenditures and their respective shares of total consumption. The welfare impact of the reforms is found by comparing real consumption under the baseline and reform scenarios (valued at purchasing power under the reform scenario).

5.13. In this model, the reforms have three channels of impact on households: (i) a growth effect, captured by the CGE model; (ii) a direct effect on electricity prices and demand, captured by the price of electricity in the cost of living index and the elasticity of demand for electricity; and (iii) an indirect effect on other prices, estimated through the CGE model and applied to real consumption through the cost of living index. A range of different scenarios is then simulated using assumptions about cash transfers that the government might provide to compensate for the negative impact of the reforms (described in the next section), and estimate how these affect the overall welfare calculus for each consumption quintile.

5.14. Specific calculations that are done using the household survey data from the PSLM are described in the following.

5.15. For household  $i$ , the implied quantity of electricity consumed by each household each month,  $c_i$ , is recovered from the observed monthly electricity expenditure,  $x_i$  (net of taxes and charges), by inverting the all-slab benefit pricing formula which was in effect during the survey period and applying the prevailing tariff, tax and fee rates in 2010/11 (see Table 5.1):

$$x_{i,t} = \begin{cases} 75 \text{ if } c_{i,t} \leq \frac{75}{p_1} \\ p_1 c_{i,t} \text{ if } c_{i,t} \in \left] \frac{75}{p_1}, b_1 \right] \\ p_2 c_{i,t} \text{ if } c_{i,t} \in ]b_1, b_2] \\ \sum_{j=2}^{k-1} p_j (b_j - b_{j-1}) + p_k (c_{i,t} - b_{k-1}) \text{ if } c_{i,t} \in ]b_{k-1}, b_k] \\ \text{for } k = 3, \dots, n \end{cases}$$

Where  $p_j$  is the tariff per kWh in bracket  $j$ ,  $b_j$  is the upper bound for bracket  $j$ , and  $n$  is the total number of brackets. Note that there is a minimum charge of PKR 75 per household per month, and that the lifeline tariff rate,  $p_1$ , applies only to consumers below  $b_1$  (currently 50 kWh per month). Otherwise, all households benefited from the tariff in each bracket.

5.16. The household's total expenditure is assumed to grow each year at the same rate as nominal household consumption (obtained from the CGE model). We do not update the household weights for population growth, so that the distribution of household sizes remains static. The quantity of electricity consumed is updated each year based on the change in the marginal price of electricity for each household,  $dp_{i,t}$ , and real household consumption growth,  $g_t$ , according to the following formula:<sup>19</sup>

$$c_{i,t} = c_{i,t-1}(1 + \varepsilon \cdot dp_{i,t} + \eta g_t),$$

Where  $\varepsilon = -0.17$  is the price elasticity and  $\eta = 0.8$  the income elasticity of demand for electricity (as assumed in the CGE model). The change in the marginal price of electricity is just the change in the tariff for the block in which the consumer was located in the previous year.

5.17. Using the formula above for  $x_{i,t}$ , the household's electricity expenditure in each subsequent year is updated based on projected consumption. Under the previous-slab benefit formula, the calculation becomes:

$$\tilde{x}_{i,t} = \begin{cases} 75 & \text{if } c_{i,t} \leq \frac{75}{p_1} \\ p_1 c_{i,t} & \text{if } c_{i,t} \in \left] \frac{75}{p_1}, b_1 \right] \\ p_2 c_{i,t} & \text{if } c_{i,t} \in ]b_1, b_2] \\ p_{k-1} b_{k-1} + p_k (c_{i,t} - b_{k-1}) & \text{if } c_{i,t} \in ]b_{k-1}, b_k] \\ & \text{for } k = 3, \dots, n \end{cases}$$

5.18. As discussed in the text, for the time being there is a twist in the calculation above for consumers in the fourth bracket (201-300 kWh), who pay the second bracket (1-100 kWh) tariff for their first 200 kWh. This is also accounted for in the calculations.

5.19. Defining  $\mu_t$  as the unit cost for electricity at time  $t$ , the subsidy to the consumer can be calculated as follows:

$$s_{i,t} = \mu_t c_{i,t} - x_{i,t}.$$

5.20. The total cost of electricity, including taxes and fees, is denoted by  $x_{i,t}^*$ . Taxes and fees are separate in the calculation of the subsidy bill, since these revenues do not accrue to the ministry responsible for subsidies. The welfare effect of the reforms in each year is defined as the amount of compensation  $\tau_{i,t}$  in current rupees that each household would need to receive in order to enjoy the same real consumption under the scenario as they would have under the

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<sup>19</sup> This formula can easily be obtained by applying the Envelope Theorem to the first-order conditions of a standard, two-good consumer maximization problem.

baseline.<sup>20</sup> Let  $I_{i,t}^B$  be the cost of living index for consumer  $i$  in period  $t$  under the baseline assumptions, and  $I_{i,t}^S$  be the counterfactual cost of living for the same consumer under the reform scenario. Then define  $\tau_{i,t}$  can be defined as follows:

$$\frac{c_{i,t}^S + \tau_{i,t}}{I_{i,t}^S} = \frac{c_{i,t}^B}{I_{i,t}^B}$$

Rearranging for  $\tau_{i,t}$ , gives:

$$\tau_{i,t} = c_{i,t}^B \frac{I_{i,t}^S}{I_{i,t}^B} - c_{i,t}^S$$

5.21. The welfare effect is represented as  $-\tau_{i,t}$ , namely the extent to which an uncompensated household is worse off as a result of the reform.

5.22. The cost of living indices  $I_{i,t}^B$  and  $I_{i,t}^S$  are defined following a chained Laspeyres price index formula, with three goods: food, non-food items, and electricity.<sup>21</sup> The expenditure shares of food ( $s_i^f$ ) and non-food ( $s_i^{nf}$ ) items were estimated from the 2010 observed data, with each household allocated the mean food and non-food shares of their per capita expenditure quintile. The electricity expenditure share ( $s_i^e$ ) is calculated from electricity and total expenditure in the base year, 2012/13. The cost of living index is then defined individually for each household as follows:

$$I_{i,t} = \frac{s_i^f F_t + (s_i^{nf} - s_i^e) N_t + s_i^e E_{i,t}}{s_i^f F_0 + (s_i^{nf} - s_i^e) N_0 + s_i^e E_{i,0}}$$

Where  $F_t$  and  $N_t$  are the food-price and non-food price indexes (obtained from the CGE model) and  $E_{i,t}$  is a household-specific index of the average cost of electricity including taxes and fees (relative to the base year 0):

$$E_{i,t} = \frac{x_{i,t}^*/c_{i,t}}{x_{i,0}^*/c_{i,0}}$$

5.23. It is important to note that the cost of living index is defined relative to the base year in every case, so that the welfare comparison between baseline and counterfactual in each year measures the *cumulative* impact of all reforms up to that point.

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<sup>20</sup> In demand theory this is referred to as the *compensating variation*. The calculations here assume a money-metric utility function for simplicity, although the same results hold as long as we ignore the effects of relative price changes on baseline spending patterns.

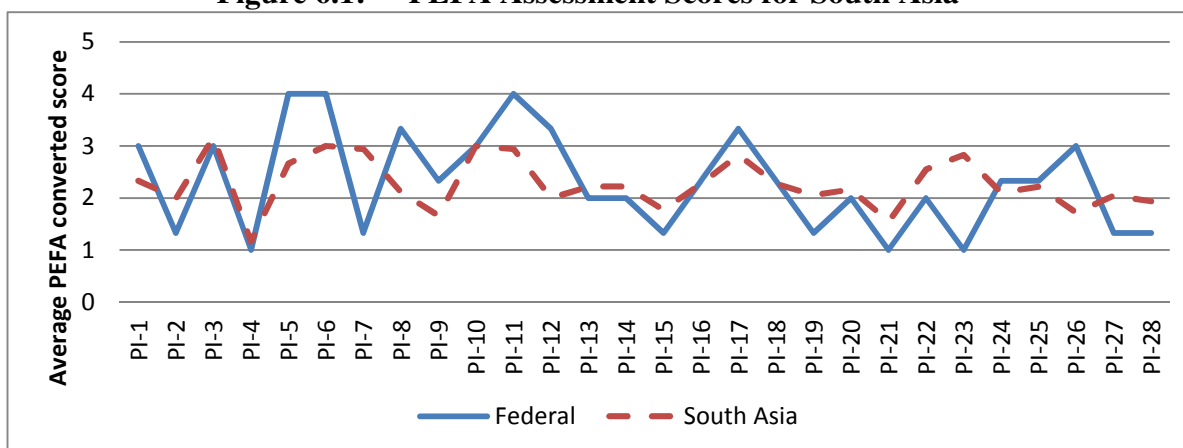
<sup>21</sup> Electricity is technically included in the non-food price index, but we adjust the non-food weight down to account explicitly for electricity.

## ANNEX 6: Public Financial Management

6.1. **Pakistan has a fairly well-developed infrastructure for public financial management (PFM).** At the policy level, Parliament has a key role in authorizing revenues, expenditures, and debts. The MOF plays a pivotal role in budget preparation and expenditure control. Line ministries, departments, and agencies have well-defined roles in implementing budgets and rendering accounts. The Controller General of Accounts prepares annual financial statements. PFM benefits from a comprehensive financial information system, which is now the core fiscal and financial management system of government. The government has established a sound legal framework for coordinating fiscal and debt management policies and for improving fiscal transparency through the Fiscal Responsibility and Debt Limitation Act of 2005. The Public Expenditure and Financial Accountability (PEFA) 2012 scores compare very favorably with other countries in the South Asia region (Figure 6.1).

6.2. The financial statements of SBP for the financial year ended 30 June 2014 were audited. The auditors gave an unqualified opinion on the statements concluding that the statements gave a true and fair view of the financial position, financial performance, and cash flows. IMF issued a Safeguards Assessment of the SBP on March 27 2009 and produced an update report on March 3 2010 with a further update on December 16, 2013. All three of these Safeguards Assessment reports have been reviewed by the World Bank. The review identified that some of the recommendations, such as improving internal operations and adoption of International Financial Reporting Standards as a Financial Reporting Framework had been met. Further improvements of internal controls and foreign exchange reserve management are still in progress.

**Figure 6.1: PEFA Assessment Scores for South Asia**



*Note: South Asia countries include Afghanistan (2008), Bangladesh (2006), Nepal (2008), Bhutan and India (2010), and Maldives (2009).*

6.3. **Information in budget documents is comprehensive and budget documents are available to the general public.** The improvement in the Open Budget Survey score for 2012 from 38 to 58 reflects this. Implementation of the Integrated Financial Management Information System is based on the Government Finance Statistics-compliant chart of accounts at all levels of government has facilitated budget tracking down to the third tier and preparation of timely reliable financial reports. The System facilitates submission of annual financial statements for audit within two months of the close of the financial year and monthly financial reports are finalized within 10–15 days after the close of the month. Audit reports are presented to the legislature within eight months of the close of the financial year.

6.4. **Despite progress in many areas of PFM, the latest federal and subnational PEFA reports show some areas of concern.** The internal control system is largely based on rules and regulations issued by the MOF, which are quite elaborate. However, instances of noncompliance with rules and regulations have been reported by the Auditor General of Pakistan. It is therefore of particular concern that no progress has been made on internal audit in recent years. The internal audit function is assigned as a responsibility of chief finance and accounting officers, but has not yet been developed as an administrative operating function. Progress in legislative oversight has also been mixed across federal and provincial governments, largely due to the absence of functioning public accounts committees in some provinces. The scrutiny of audit reports by the most recent federal committee, however, was extensive and succeeded in addressing a large backlog of audit reports to be reviewed.

6.5. **Improving PFM capacity at provincial and lower tiers has emerged as a key challenge.** The capacity to plan, manage, implement and account for results of policies and programs is critical for achieving development objectives. With the 18th Amendment to the Constitution (April 2010), the majority of service delivery–related functions have devolved to the provinces. The government realizes the need to strengthen its PFM systems by addressing the capacity of provincial institutions, processes, and individuals to use resources well. This is supported by findings of recent subnational PEFA assessments that have highlighted the scope for improving capacity to manage provincial finances. Weaknesses are somewhat mitigated by the consolidation of current PFM reforms which include nationwide automation of budgeting, accounting, and financial reporting; modernization of auditing practices; and adoption of medium-term budgetary frameworks.

## **Procurement**

6.6. **A strong public procurement system enhances the efficiency of budgetary expenditure.** Typically for a developing country 15-20 percent of annual GDP is related to procurement contracts. Pakistan should be no exception. In Pakistan, procurement is a devolved subject. The Public Procurement Regulatory Authority (PPRA) at the federal and provincial levels is mandated to regulate the procurement function and act as respective custodians of the regulatory frameworks. PPRAs are functional at the federal level, in Sindh and in the Punjab with laws enacted and rules notified. In Khyber Pakhtunkhwa, however, the PPRA is at a nascent stage; the law has been enacted and rules are yet to be notified. Balochistan enacted procurement regulations in 2009 but are yet to implement them. Recently the National Procurement Strategy has been developed which highlights the need for harmonization amongst the various PPRAs, specifically towards: having harmonized standard bidding documents; capacity building of PPRAs; monitoring and evaluation; procurement professionalization; and e-procurement. A major development in monitoring is the effort to align the Auditor General's office and procurement regulators to conduct procurement performance audits. PEFA assessments conducted by the Bank indicate that implementation of Public Procurement rules requires focus and adequate support. The Bank has supported the PPRAs in developing the e-procurement strategy, as well as preparing a training strategy for procurement staff. Both strategies are under the review of PPRA Boards. Once the strategies are approved, the PPRA intends to request Bank for support for implementation. The Sindh and Punjab PPRAs are also working towards developing their M&E systems. Federal and provincial regulations are also a good support in enhancing transparency and thus accountability of public expenditures. The Ministry of Water and Power and some power sector entities have requested sector specific

support in improving procurement performance to achieve efficient, economic and transparent procurement processes ultimately resulting in improved service delivery.

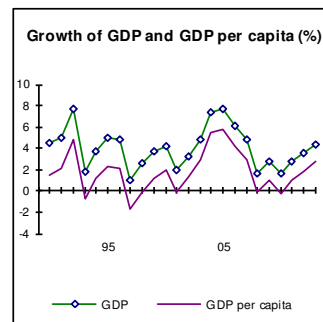
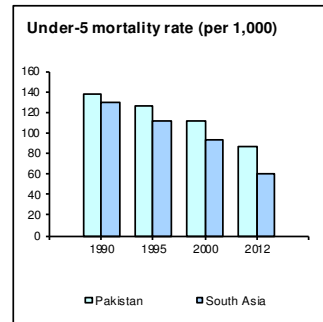
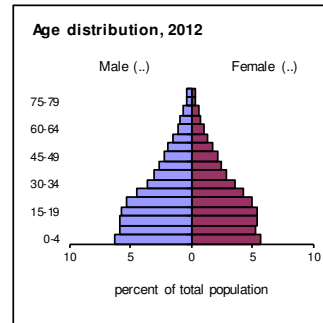
6.7. **While the good aspects of the regulatory regime that assures competitiveness may be diluted by gaps in implementation, there are certain SROs or Import Policy Orders (IPOs) or legal interpretations which overlap with the procurement function.** Government has been engaged in a discussion with development partners on SRO 827(I)/2001 and SRO 809/I/86 that limit competition by making local participation in goods procurements compulsory. The review may cover SROs/directives and any other instructions having such implications, in order to facilitate equal opportunity and adequate support to local industry. A study is also deemed beneficial to review the overlapping jurisdiction of the various accountability and other institutions on procurement function, specifically in view of the 18<sup>th</sup> amendment, which may imply double/uneven taxation to bidders incorporated in different provinces. On privatization, governing regulations are: (i) Privatization Commission (Hiring of Financial Advisors) Regulations, 2007; and (ii) Privatization Commission (Hiring of Valuators) Regulations, 2001 amended in 2007. These regulations are framed under Section 41 of PC Ordinance 2000. In a letter to Transparency International in 2009 PC clarified the jurisdiction of Public Procurement Rules 2004 (PPR-2004). As the privatization process is about ‘selling’ rather than ‘acquiring’ assets it is not considered as a procurement activity as defined by Section 2 (1) of Public Procurement Regulatory Authority Ordinance, 2002.

## ANNEX 7: Country At A Glance

### Pakistan at a glance

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Key Development Indicators (2013)	Pakistan	South Asia	Lower middle income	
Population, mid-year (millions)	182.1	1,649	2,507	
Surface area (thousand sq. km)	796	5,131	20,742	
Population growth (%)	1.7	1.3	1.5	
Urban population (% of total population)	37	31	39	
GNI (Atlas method, US\$ billions)	247.0	2,370	4,745	
GNI per capita (Atlas method, US\$)	1,360	1,437	1,893	
GNI per capita (PPP, international \$)	2,880	3,503	3,877	
GDP growth (%)	4.4	4.9	4.7	
GDP per capita growth (%)	2.7	3.5	3.2	
<b>(most recent estimate, 2005–2012)</b>				
Poverty headcount ratio at \$ 1.25 a day (PPP, %)	21	31	27.1	
Poverty headcount ratio at \$ 2.00 a day (PPP, %)	60	67	56.3	
Life expectancy at birth (years)	66	67	66	
Infant mortality (per 1,000 live births)	69	47	46	
Child malnutrition (% of children under 5)	31	32	24	
Adult literacy, male (% of ages 15 and older)	69	73	80	
Adult literacy, female (% of ages 15 and older)	40	50	62	
Gross primary enrollment, male (% of age group)	99	111	107	
Gross primary enrollment, female (% of age group)	86	109	104	
Access to an improved water source (% of population)	91	91	88	
Access to improved sanitation facilities (% of population)	48	40	47	
<b>Net Aid Flows</b>				
	1980	1990	2000	2013 <sup>a</sup>
<i>(US\$ millions)</i>				
Net ODA and official aid	1,181	1,127	703	2,019
<i>Top 3 donors (in 2012):</i>				
United States	42	167	88	625
United Kingdom	44	54	24	300
Japan	12	194	280	256
Aid (% of GNI)	4.6	2.7	1.0	0.9
Aid per capita (US\$)	15	10	5	11
<b>Long-Term Economic Trends</b>				
Consumer prices (annual % change)	..	9.7	3.6	7.4
GDP implicit deflator (annual % change)	9.1	6.5	24.9	7.4
Exchange rate (annual average, local per US\$)	9.9	214	517	96.8
Terms of trade index (2000 = 100)	..	102	100	55
<b>1980–90 1990–2000 2000–13</b> <i>(average annual growth %)</i>				
Population, mid-year (millions)	80.0	111.1	143.8	182.1
GDP (US\$ millions)	23,690	40,010	73,952	232,287
<i>(% of GDP)</i>				
Agriculture	29.5	26.0	25.9	25.1
Industry	24.9	25.2	23.3	21.1
Manufacturing	15.9	17.4	14.7	13.0
Services	45.6	48.8	50.7	47.8
Household final consumption expenditure	83.1	73.8	75.4	81.2
General gov't final consumption expenditure	10.0	15.1	8.6	11.0
Gross capital formation	18.5	18.9	17.2	14.6
Exports of goods and services	12.5	15.5	13.4	13.2
Imports of goods and services	24.1	23.4	14.7	19.9
Gross savings	..	..	..	14.1



Note: Figures in italics are for years other than those specified. .. indicates data are not available.  
a. Aid data are for 2012.

Development Economics, Development Data Group (DECDG).

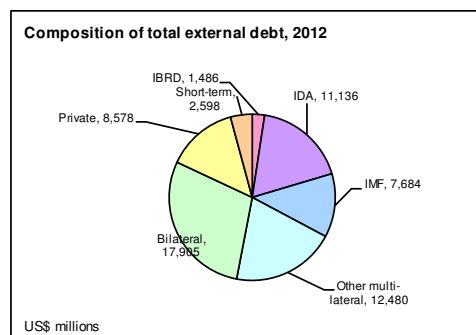
<b>Balance of Payments and Trade</b>	<b>2000</b>	<b>2013</b>
<i>(US\$ millions)</i>		
Total merchandise exports (fob)	8,191	24,795
Total merchandise imports (cif)	9,602	40,226
Net trade in goods and services	-2,275	-16,903
Current account balance	-217	-2,496
as a % of GDP	-0.3	-1.1
Workers' remittances and compensation of employees (receipts)	1,075	4,007
Reserves, including gold	1,510	7,198

**Central Government Finance**

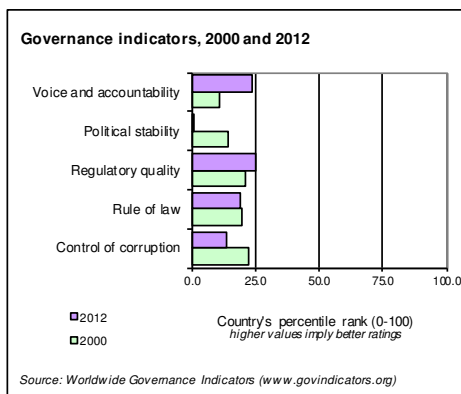
<i>(% of GDP)</i>		
Current revenue (including grants)	13.7	13.3
Tax revenue	10.2	9.8
Current expenditure	16.7	16.3
Overall surplus/deficit	-5.3	-8.1
Highest marginal tax rate (%)		
Individual	30	20
Corporate	35	35

**External Debt and Resource Flows**

<i>(US\$ millions)</i>		
Total debt outstanding and disbursed	32,954	56,459
Total debt service	2,864	9,347
Debt relief (HIPC, MDRI)	-	-
Total debt (% of GDP)	44.6	24.3
Total debt service (% of exports)	26.8	20.4
Foreign direct investment (net inflows)	308	..
Portfolio equity (net inflows)	35	..



<b>Private Sector Development</b>	<b>2000</b>	<b>2012</b>
Time required to start a business (days)	-	21
Cost to start a business (% of GNI per capita)	-	9.9
Time required to register property (days)	-	50
Ranked as a major constraint to business (% of managers surveyed who agreed)	<b>2000</b>	<b>2012</b>
n.a.	47.5	..
n.a.	46.0	..
Stock market capitalization (% of GDP)	8.9	19.5
Bank capital to asset ratio (%)	4.9	9.6



<b>Technology and Infrastructure</b>	<b>2000</b>	<b>2012</b>
Paved roads (% of total)	56.0	72.6
Fixed line and mobile phone subscribers (per 100 people)	2	70
High technology exports (% of manufactured exports)	0.4	1.7

**Environment**

Agricultural land (% of land area)	35	34
Forest area (% of land area)	2.7	2.1
Terrestrial protected areas (% of land area)	10.2	10.7
Freshwater resources per capita (cu. meters)	367	312
Freshwater withdrawal (% of internal resources)	33.8	33.6
CO2 emissions per capita (mt)	0.74	0.93
GDP per unit of energy use (2005 PPP \$ per kg of oil equivalent)	4.2	4.9
Energy use per capita (kg of oil equivalent)	445	482

Note: Figures in italics are for years other than those specified.  
.. indicates data are not available. - indicates observation is not applicable.

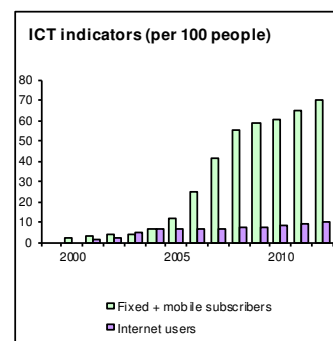
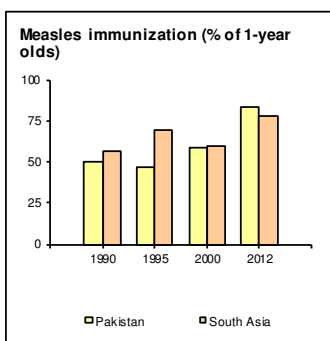
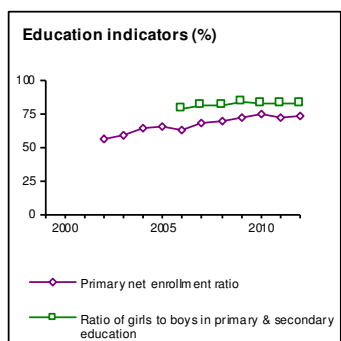
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Development Economics, Development Data Group (DECDG).



With selected targets to achieve between 1990 and 2015  
(estimate closest to date shown, +/- 2 years)

	Pakistan			
	1990	1995	2000	2012
<b>Goal 1: halve the rates for extreme poverty and malnutrition</b>				
Poverty headcount ratio at \$ 1.25 a day (PPP, % of population)	64.7	48.1	29.1	21.0
Poverty headcount ratio at national poverty line (% of population)	..	..	30.6	22.4
Share of income or consumption to the poorest quintile (%)	8.1	10.0	8.7	9.6
Prevalence of malnutrition (% of children under 5)	39.0	34.2	31.3	30.9
<b>Goal 2: ensure that children are able to complete primary schooling</b>				
Primary school enrollment (net, %)	..	..	56	72
Primary completion rate (% of relevant age group)	..	..	..	72
Secondary school enrollment (gross, %)	21	..	..	37
Youth literacy rate (% of people ages 15-24)	..	..	55	71
<b>Goal 3: eliminate gender disparity in education and empower women</b>				
Ratio of girls to boys in primary and secondary education (%)	50	..	..	82
Women employed in the non agricultural sector (% of non agricultural employment)	8	9	13	13
Proportion of seats held by women in national parliament (%)	10	2	21	23
<b>Goal 4: reduce under-5 mortality by two-thirds</b>				
Under-5 mortality rate (per 1,000)	138	126	112	86
Infant mortality rate (per 1,000 live births)	106	97	88	69
Measles immunization (proportion of one-year olds immunized, %)	50	47	59	83
<b>Goal 5: reduce maternal mortality by three-fourths</b>				
Maternal mortality ratio (modeled estimate, per 100,000 live births)	400	330	280	190
Births attended by skilled health staff (% of total)	19	18	23	49
Contraceptive prevalence (% of women ages 15-49)	15	18	28	29
<b>Goal 6: halt and begin to reverse the spread of HIV/AIDS and other major diseases</b>				
Prevalence of HIV (% of population ages 15-49)	0.1	0.1	0.1	0.1
Incidence of tuberculosis (per 100,000 people)	231	231	231	231
Tuberculosis case detection rate (% all forms)	61	5	3	65
<b>Goal 7: halve the proportion of people without sustainable access to basic needs</b>				
Access to an improved water source (% of population)	85	87	88	91
Access to improved sanitation facilities (% of population)	27	32	37	48
Forest area (% of land area)	3.3	3.0	2.7	2.1
Terrestrial protected areas (% of land area)	10.1	10.1	10.2	10.7
CO2 emissions (metric tons per capita)	0.6	0.7	0.7	0.9
GDP per unit of energy use (constant 2005 PPP \$ per kg of oil equivalent)	4.2	4.2	4.2	4.9
<b>Goal 8: develop a global partnership for development</b>				
Telephone mainlines (per 100 people)	0.8	1.7	2.1	3.2
Mobile phone subscribers (per 100 people)	0.0	0.0	0.2	67.1
Internet users (per 100 people)	0.0	0.0	1.3	10.0
Households with a computer (%)	..	..	..	12.5



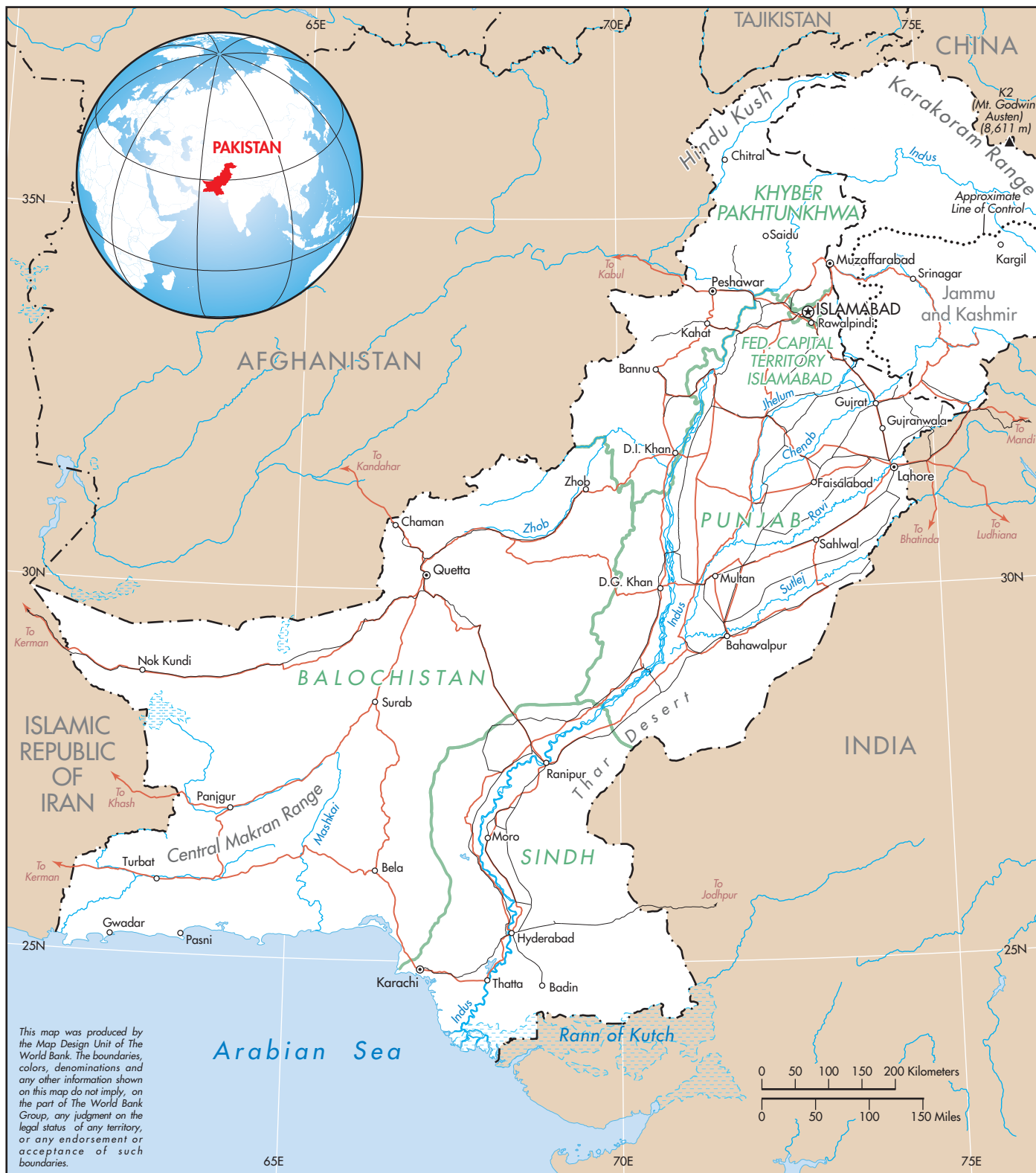
Note: Figures in italics are for years other than those specified. .. indicates data are not available.

9/3/15

Development Economics, Development Data Group (DECDG).

# PAKISTAN

- SELECTED CITIES AND TOWNS
- ⦿ PROVINCE CAPITALS
- ⊗ NATIONAL CAPITAL
- RIVERS
- MAIN ROADS
- RAILROADS
- PROVINCE BOUNDARIES
- INTERNATIONAL BOUNDARIES



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