

Pakistan Energy Sector

2 June 2014

Background

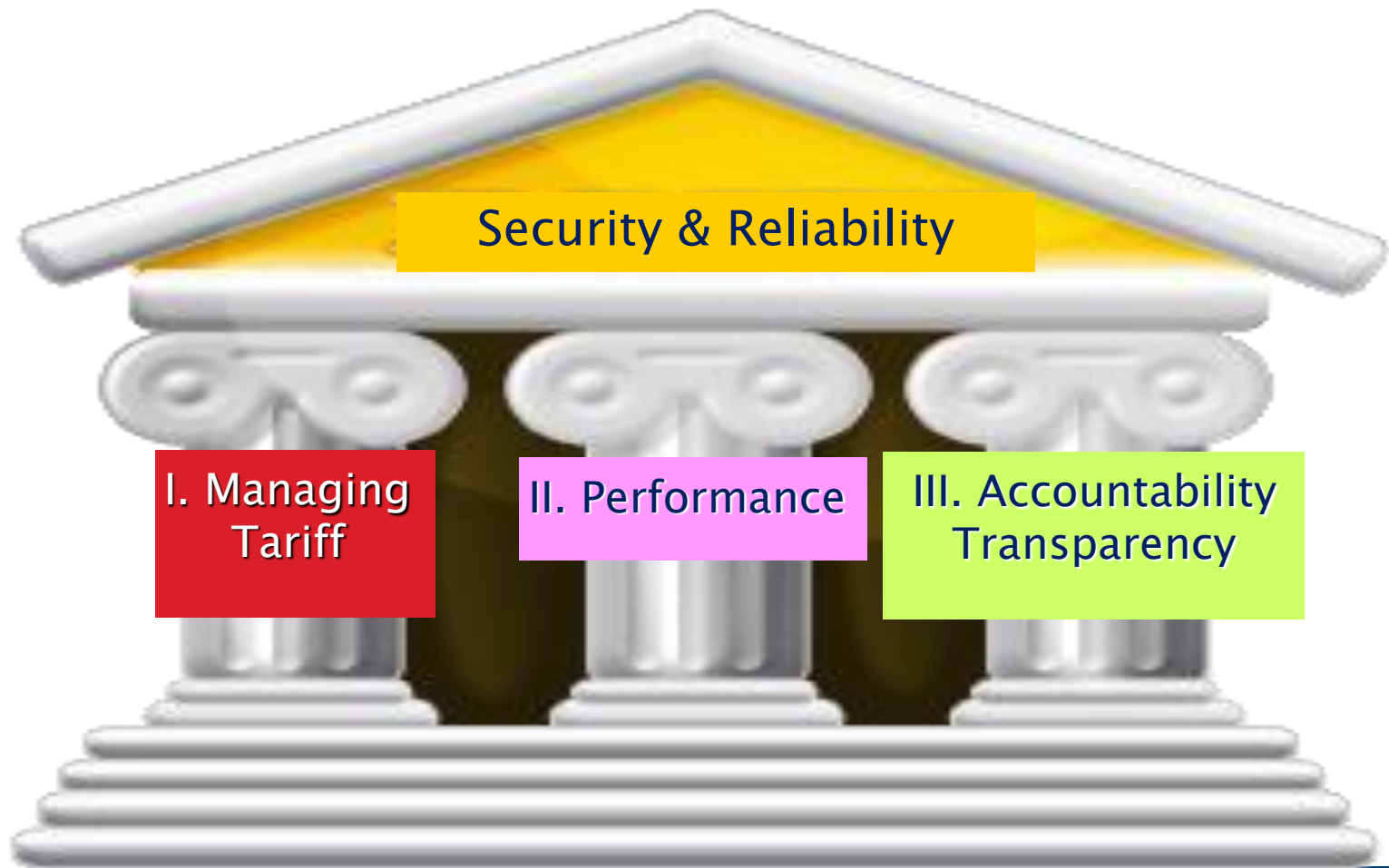
▶ Stalled Economy

- 5 year average of GDP growth 3%
- Foreign currency reserves are down to \$3 billion
- 1/3 total increase in domestic debt caused by power sector subsidies 2012 & 2013

▶ Energy Crisis

- 5000 MW shortage (10–20 hours load shedding)
- Unemployment (unreliable power reduces current production and future orders)
- Effect on GDP growth negative 2% per year (7% growth needed to absorb new entrants into the workforce)
- Fiscal Subsidies is \$4.8 billion in FY2013
- Payment Arrears– \$4.8 billion in May 2013 estimated at \$900 million in Dec 2013 and \$2.7 billion in Mar 2014
- one-third of population do not have access to grid electricity

Energy Sector



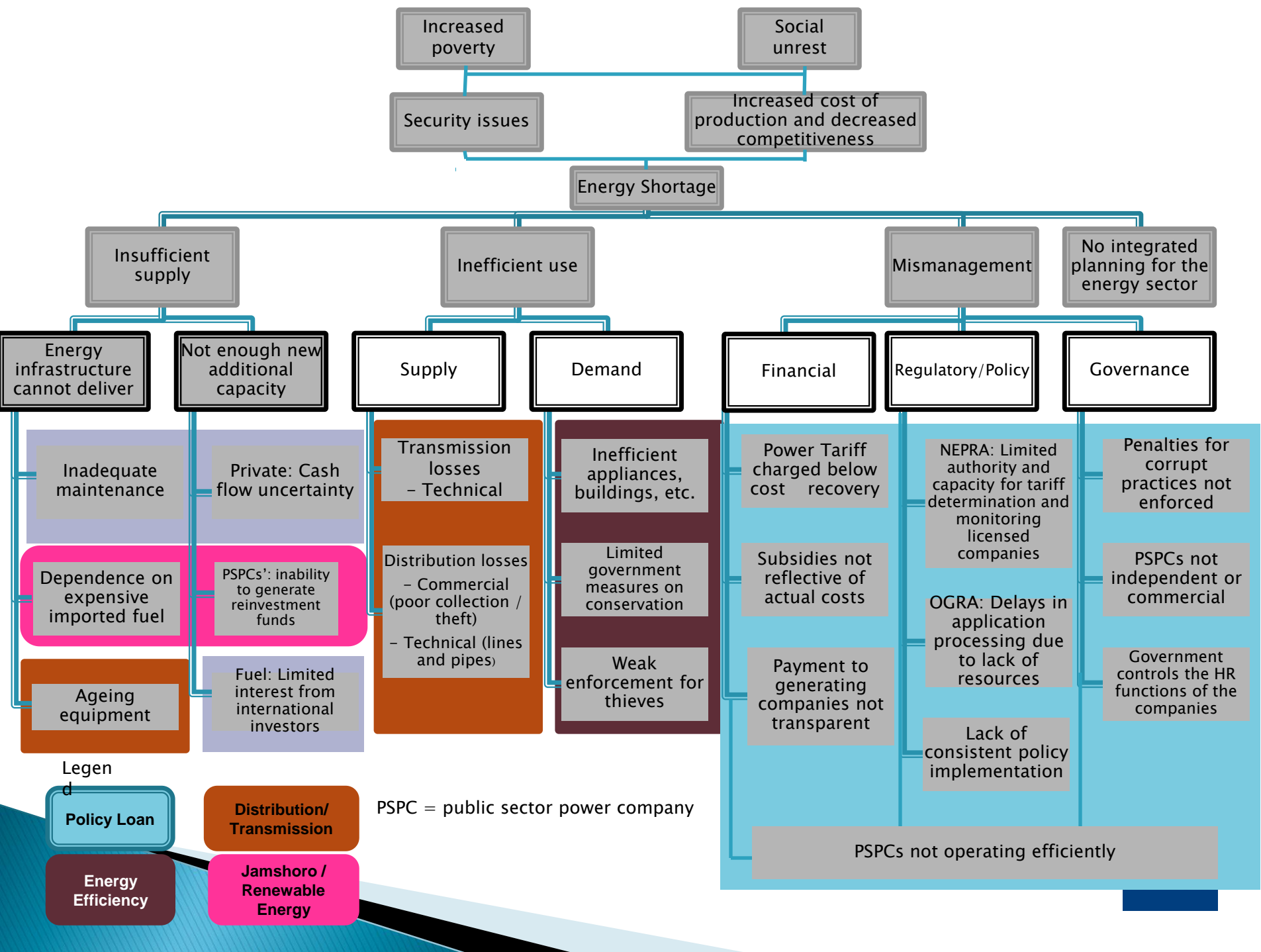
Three pillars for energy sector security and reliability

Issues

- ▶ Managing Tariff
 - Below-cost recovery tariff, low collections
 - High Subsidies–1.75% of GDP
- ▶ Performance
 - High losses – 23% transmission and distribution
 - High costs – 35% generation by oil costs 75% of total
 - Energy wasted – no energy conservation
- ▶ Accountability and Transparency (Governance)
 - Little monitoring or enforcement of licenses, regulations and guidelines
 - No one held accountable or responsible
 - Sector information not available or understood

Energy Sector Reforms

- ▶ Reform started in 1992 but implementation has stalled
- ▶ Principals set out with MOWP in 2010 FODP Energy Task Force Report
- ▶ 2013 National Power Policy Targets
 - Decrease supply demand gap from 4500 – 5000 MW today to 0 by 2017
 - Decrease cost of generation from 12c / unit today to ~10c / unit by 2017
 - Decrease transmission and distribution losses from ~23–25% to ~16% by 2017
 - Increase collection from ~85% to 95% by 2017
 - Decrease decision making processing time at the Ministry, related departments and regulators from long to short durations
- ▶ Undertaking for IMF EFF
 - Decrease subsidies to 0.3–0.4% of GDP by 2017 from 1.78–5% in 2013



Implementation

	Utilization (last PFR)	MFF	Unsigned MFF Amount	Ongoing loan	Tranches			
					1	2	3	4
MFF Renewable energy	2017 (2015)	510	376	134	134			
MFF Transmission 1	2016 (2014)	800	245	602	139	170	243	[245] (2014)
MFF Distribution 1	2018 (2014)	810	0	810	210	173	245	243
MFF Energy Efficiency	2019 (2014)	780	720	60	60			
Jamshoro Power Generation Project	2023			900				
Total		2,900		2,506				

2014–2016 Project Pipeline (Indicative)

Project name	2014	2015	2016
Sustainable Energy Sector Reform Program*	400	150	150
MFF Power Transmission EIP, Tranche 4	245		
MFF Power Distribution EIP II		220	250
MFF Power Transmission Energy Investment Program (EIP) II			250
MFF [Sustainable Energy Capacity Program]			200
Sub-total	645	370	850

* The pipeline is being discussed with government.

Sustainable Energy Sector Reform

- ▶ Approval: Apr 2014
- ▶ Programmatic Approach: 5y \$1.2bn
- ▶ Objective: Affordable, reliable, sustainable and secure energy sector to support Pakistan's economic growth
 - Achieved by supporting the implementation of Pakistan's National Power Policy 2013
- ▶ Outputs
 - Managing tariffs and subsidies
 - Improved sector performance and enhancing the market access for private sector participation
 - Achieved accountability and transparency

Jamshoro Power Generation

- ▶ Approval: Dec 2013
- ▶ Close: Dec 2023
- ▶ First Supercritical Coal Fired Plant in Pakistan \$900m
- ▶ Objective
 - Enhanced energy supply in Pakistan through a more efficient energy mix by moving away from expensive HFO to less expensive coal
- ▶ Outputs
 - 600–MW (net) supercritical coal–fired unit, 80/20 blend of imported sub-bituminous coal and domestic lignite
 - 5 years O&M support
 - International standard environmental controls and bio-remediation of site
 - Promotion of education on coal–fired plant operation by providing on–the–job training, and integrating training into technical school curriculum

MFF – Transmission

- ▶ Approval: Dec 2006
- ▶ Close: Dec 2016 (last PFR: 2014)
- ▶ Program: OCR \$790 million, ADF \$10 million
- ▶ Outputs
 - 132/220 and 500 kV transmission systems rehabilitated, augmented and expanded – system bottlenecks removed
 - 1634km of transmission lines

MFF – Distribution

- ▶ Approval: 12 Sep 2008
 - ▶ Close: Sep 2018 (last PFR: Dec 2014)
 - ▶ Program: OCR \$800 million, ADF \$10 million
 - ▶ Outputs
 - Power distribution systems rehabilitated, augmented, and expanded – system bottlenecks removed through (i) Secondary Transmission and Grid Investments, (ii) Energy Loss Reduction, (iii) Distribution of Power, and (iv) Capacitor Installation Components
- DISCOs become true commercial entities

MFF – Energy Efficiency

- ▶ Approval: Sep 2009
- ▶ Close: Sep 2019 (last PFR: 2014)
- ▶ Program: OCR \$760 million, ADF \$20 million, AFD Euro 150 million
- ▶ Outputs
 - Energy savings and support of low carbon growth through supply and demand side intervention

MFF – Renewable Energy

- ▶ Approval: Dec 2006
- ▶ Close: Dec 2017 (last PFR: Dec 2015)
- ▶ Program: OCR \$500 million, ADF \$10 million
- ▶ Outputs
 - Small medium hydro > 50 MW and other RE generation units (325 MW by 2017)
 - Due diligence support
 - Federal and provincial capacity development for RE

Thank you

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