

## **ENERGY**

Energy Department was established by Government of Punjab in 2011 to oversee and administer the development, growth and regulation of Energy Sector in Punjab. Whereas Department has a consistent focus on effective regulation in energy conservation and regulation it has set up associate wings to facilitate power generation in the province. Punjab Power Development Board (PPDB) facilitates power generation in the province by engaging private sector. In addition to that two public sector companies i.e. Punjab Power Development Company Limited (PPDCL) and Punjab Quaid-e-Azam Solar Company have been set up to expedite power generation in the province.

### **SECTOR OVERVIEW**

Total installed electricity generation capacity of Pakistan is 22,668 MW with demand growing at 8 percent annually. Punjab consumes 68% of the total electricity generated in the country and is coping with severe energy shortfall that has adversely hit its annual GDP growth for the past many years.

### **IMPORTANCE OF ENERGY IN ECONOMIC GROWTH**

Private sector firms in Punjab have identified electricity shortage as the biggest constraint in doing business. Experts have suggested that removing the electricity shortage in Punjab can increase Gross Regional Product (real GRP) by as much as 2%, and increase Punjab's exports by USD 1.0 billion. Investment in energy sector has the potential to crowd in substantial investment by private enterprises in the manufacturing and services sectors. Therefore, removing the electricity shortage is a top priority of the Government.

### **VISION**

Provision of affordable energy to all segments of provincial economy through conservation of energy and increase in power generation by engaging private sector

### **OBJECTIVES**

- Availability of affordable energy to all citizens
- Energy Conservation
- Facilitating private sector in power generation, sale, purchase & distribution.
- Sustainable Energy Mix by introducing appropriate technologies.
- Using indigenous sources (e.g. solar, coal, biomass and biogas) in power generation.

## SECTORAL INITIATIVES

- Construction of Four Hydropower Stations to produce 20 MW of electricity under "REDSIP" program costing Rs. 13,293 million inclusive of current year allocation of Rs 3806 million.
- Solar Power Generation by Quaid-e-Azam Solar Power Company with an allocation of Rs. 17,000.00 million.
- Bio-mass based power plants to be installed with an allocation of Rs 2000 M near major wheat/rice producing areas.
- Bagasse-cum-coal/others fuel based power plants to be set up with an allocation of Rs 500 M
- 2.5 MW of solar PV power plant is being established at Islamia University Bahawalpur with Rs. 465.845 M to provide un-interrupted power supply & research base for the university students.
- Feasibility study to explore indigenous resources like biomass / biogas / solar /wind / small hydropower to provide power to 36 villages (one in each district) with allocation of Rs. 50 million.
- 78,000 Solar Home Solutions units to be distributed among deserving students under "CM Ujaala Program".
- Set up of two coal power projects 2x55 MW each for Industrial Areas in Lahore & Faisalabad with participation of private sector.
- Set up of 6 x (1,320) MW Coal Power Plants through private investors for which land and logistics infrastructure have been provided by the Government of Punjab.

## TREND OF ALLOCATIONS

*Rs. In Million*

<b>Sr. No</b>	<b>Year</b>	<b>Allocation</b>
<b>1</b>	<b>2012-13</b>	10,000
<b>2</b>	<b>2013-14</b>	20,431
<b>3</b>	<b>2014-15</b>	22,000

## OTHER DEVELOPMENT INITIATIVES 2014-15

An amount of Rs. 9000 million is allocated for QA Solar Bahawalpur.

**MTDF 2014-17**  
**ENERGY: SUMMARY**  
**Development Programme 2014-15**

(Million Rs.)

Sub-Sector	Capital	Revenue	Total	F. Aid	Total
<b>Ongoing Schemes</b>					
Regular	1,229.000	115.000	1,344.000	3,050.000	<b>4,394.000</b>
<b>Total</b>	<b>1,229.000</b>	<b>115.000</b>	<b>1,344.000</b>	<b>3,050.000</b>	<b>4,394.000</b>
<b>New Schemes</b>					
Regular	8,538.000	3,068.000	11,606.000	0.000	<b>11,606.000</b>
Block	0.000	6,000.000	6,000.000	0.000	<b>6,000.000</b>
<b>Total</b>	<b>8,538.000</b>	<b>9,068.000</b>	<b>17,606.000</b>	<b>0.000</b>	<b>17,606.000</b>
Other Development Initiatives	<b>0.000</b>	<b>9,000.000</b>	<b>9,000.000</b>	<b>0.000</b>	<b>9,000.000</b>
<b>Total (ongoing+new)</b>	<b>9,767.000</b>	<b>18,183.000</b>	<b>27,950.000</b>	<b>3,050.000</b>	<b>31,000.000</b>

**Development Program 2015-16**

<b>Ongoing Schemes</b>					
Regular	2,500.000	1,000.000	3,500.000	4,500.000	<b>8,000.000</b>
<b>Total</b>	<b>2,500.000</b>	<b>1,000.000</b>	<b>3,500.000</b>	<b>4,500.000</b>	<b>8,000.000</b>
<b>New Schemes</b>					
Regular	12,000.000	11,000.000	23,000.000	0.000	<b>23,000.000</b>
Block	2,000.000	5,000.000	7,000.000	0.000	<b>7,000.000</b>
<b>Total</b>	<b>14,000.000</b>	<b>16,000.000</b>	<b>30,000.000</b>	<b>0.000</b>	<b>30,000.000</b>
Other Development Initiatives	<b>0.000</b>	<b>7,000.000</b>	<b>7,000.000</b>	<b>0.000</b>	<b>7,000.000</b>
<b>Total (ongoing+new)</b>	<b>16,500.000</b>	<b>24,000.000</b>	<b>40,500.000</b>	<b>4,500.000</b>	<b>45,000.000</b>

**Development Program 2016-17**

<b>Ongoing Schemes</b>					
Regular	8,000.000	2,000.000	10,000.000	0.000	<b>10,000.000</b>
<b>Total</b>	<b>8,000.000</b>	<b>2,000.000</b>	<b>10,000.000</b>	<b>0.000</b>	<b>10,000.000</b>
<b>New Schemes</b>					
Regular	20,000.000	17,000.000	37,000.000	0.000	<b>37,000.000</b>
Block	4,000.000	9,000.000	13,000.000	0.000	<b>13,000.000</b>
<b>Total</b>	<b>24,000.000</b>	<b>26,000.000</b>	<b>50,000.000</b>	<b>0.000</b>	<b>50,000.000</b>
Other Development Initiatives	<b>0.000</b>	<b>7,000.000</b>	<b>7,000.000</b>	<b>0.000</b>	<b>7,000.000</b>
<b>Total (ongoing+new)</b>	<b>32,000.000</b>	<b>35,000.000</b>	<b>67,000.000</b>	<b>0.000</b>	<b>67,000.000</b>
<b>MTDF 2014-17: Grand Total</b>					<b>143,000.000</b>

## ENERGY: SUMMARY

*(Million Rs.)*

Type / Sub Sector	No. of Schemes	Provision for 2014-15				Projection for 2015-16	Projection for 2016-17
		Capital	Revenue	Foreign Aid	G. Total (Cap+Rev)		
<b>ON-GOING SCHEMES</b>	5	1,229.288	114.712	3,050.000	4,394.000	4,127.000	50.000
<b>NEW SCHEMES</b>	12	8,538.000	9,068.000	0.000	17,606.000	3,855.000	0.000
<b>Grand Total</b>	<b>17</b>	<b>9,767.288</b>	<b>9,182.712</b>	<b>3,050.000</b>	<b>22,000.000</b>	<b>7,982.000</b>	<b>50.000</b>

# ENERGY

(Million Rs.)

GS No	Scheme Information Approval Date / Location / scheme ID	Est. Cost	Accum. Exp June,14	Provision for 2014-15			MTDF Projections		Throw fwd Beyond June, 2017
				Cap	Rev	G. Total (Cap+Rev)	2015-16	2016-17	
1	2	3	4	5	6	7	8	9	10

## ON-GOING SCHEMES

### REGULAR

2169	Installation of solar PV Power plant at Islamia University of Bahawalpur. 23-04-2013 Bahawalpur 08-1333000-002	465.845	4.110	453.125	8.610	461.735	0.000	0.000	0.000
2170	Provision of solar panels to households below the poverty line-Chief Minsiter's Ujaala Program 19-03-2014 Punjab 08-1499000-001	3,604.544	3,423.172	0.000	35.500	35.500	0.000	0.000	0.000
2171	Solar Power System for Government offices. 13-12-2012 Punjab 08-1299000-004	47.700	6.098	0.000	40.602	40.602	0.000	0.000	0.000
2172	Renewable Energy Development Sector Investment Programe (REDSIP) 7-10-13 Punjab 08-1399000-005	13,293.000	2,884.000	3,776.163	30.000	3,806.163	4,077.000	0.000	0.000
			Local:	726.163	30.000				
			Foreign:	3,050.000	0.000				
2173	Feasibility Study Consultancy Services for development of coal based power projects at industrial estates in Punjab 16-1-2013 Lahore, Faisalabad 08-1388000-003	239.000	70.000	50.000	0.000	50.000	50.000	50.000	19.000
<b>Sub-Total: REGULAR</b>		<b>17,650.089</b>	<b>6,387.380</b>	<b>4,279.288</b>	<b>114.712</b>	<b>4,394.000</b>	<b>4,127.000</b>	<b>50.000</b>	<b>19.000</b>
<b>Total: ON-GOING SCHEMES</b>		<b>17,650.089</b>	<b>6,387.380</b>	<b>4,279.288</b>	<b>114.712</b>	<b>4,394.000</b>	<b>4,127.000</b>	<b>50.000</b>	<b>19.000</b>

## NEW SCHEMES

### REGULAR

2174	Establishment of 2x55MW coal based power plants at M-3, Industrial Estate, Faisalabad Un-Approved Faisalabad 08-1409000-009	1,000.000	0.000	450.000	0.000	450.000	550.000	0.000	0.000
2175	Solar Solution for Secretariat Buildings Un-Approved Lahore 08-1418000-007	50.000	0.000	42.000	8.000	50.000	0.000	0.000	0.000
2176	Establishment of 2x55MW coal based power plants at Sundar Industrial Estate, Lahore Un-Approved Lahore 08-1418000-008	1,000.000	0.000	450.000	0.000	450.000	550.000	0.000	0.000
2177	Energy Complex Lahore Un-Approved Lahore 08-1418000-010	150.000	0.000	40.000	5.000	45.000	105.000	0.000	0.000

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(Million Rs.)

GS No	Scheme Information Approval Date / Location / scheme ID	Est. Cost	Accum. Exp June,14	Provision for 2014-15			MTDF Projections		Throw fwd Beyond June, 2017
				Cap	Rev	G. Total (Cap+Rev)	2015-16	2016-17	
1	2	3	4	5	6	7	8	9	10
2178	Biogas based power plant at Bhoneke buffalo research institute,Pattoki District Kasur. Un-Approved Kasur , Pattoki 08-1419191-014	55.000	0.000	20.000	5.000	25.000	30.000	0.000	0.000
2179	Quaid-e-Azam Solar Power Plant Un-Approved Bahawalpur 08-1433000-018	8,000.000	0.000	6,000.000	2,000.000	8,000.000	0.000	0.000	0.000
2180	New Initiatives in Energy Sector Un-Approved Punjab 08-1499000-006	4,000.000	0.000	0.000	4,000.000	4,000.000	0.000	0.000	0.000
2181	Reconciliation of government electricity billing by installing AMI meters (Pilot Project) Un-Approved Punjab 08-1499000-012	156.000	0.000	36.000	0.000	36.000	120.000	0.000	0.000
2182	Feasibility studies for Removal of 36 villages from National Grid (one in each district) Un-Approved Punjab 08-1499000-013	50.000	0.000	0.000	50.000	50.000	0.000	0.000	0.000
2183	Co-generation Power Plants using Bagasse-cum-coal/other fuels (Sugar cane producing districts) Un-Approved Punjab 08-1499000-015	2,000.000	0.000	0.000	500.000	500.000	1,500.000	0.000	0.000
2184	Bio-mass based Power Plants Set-up near wheat and rice producing areas Un-Approved Punjab , Punajb 08-1499000-016	3,000.000	0.000	1,500.000	500.000	2,000.000	1,000.000	0.000	0.000
2185	Energy Efficiency & Conservation Program Un-Approved Punjab 08-1499000-017	2,000.000	0.000	0.000	2,000.000	2,000.000	0.000	0.000	0.000
<b>Sub-Total: REGULAR</b>		21,461.000	0.000	8,538.000	9,068.000	17,606.000	3,855.000	0.000	0.000
<b>Total: NEW SCHEMES</b>		21,461.000	0.000	8,538.000	9,068.000	17,606.000	3,855.000	0.000	0.000
<b>Grand Total</b>		39,111.089	6,387.380	12,817.288	9,182.712	22,000.000	7,982.000	50.000	19.000