

ENERGY

Consequent upon 18th Constitutional Amendment in 2011, Government of the Punjab established Energy Department to enhance energy security and fuel economy by creating an environment that reliably meet the energy demands of all sectors of Punjab's economy. The department started working on the short term and strategic goals through a multi-dimensional approach ranging from attracting private selector investment, energy efficiency and conservation programmes, and exploring new venues for sustainable energy production.

Energy Department aims at fully utilize the indigenous energy resources that is solar, Hydel, bio mass and coal. The department also established dedicated companies / attach bodies to work in the specific energy related areas.

SECTOR OVERVIEW

Punjab's power consumption is 68%, with a demand growth of 6-8% per annum. Presently, there is a demand-supply gap of 5000 MW. Punjab is currently facing both electricity and gas load shedding and with over a 90 million populations of Punjab is worst, hit. There is great need for creating different institutions and undertaking development projects in public and private sector for energy generation and conservation. Total installed electricity generation capacity of Pakistan is 24,906 MW (as of 2015 end) and Punjab is coping with severe energy shortfalls that one adversely affecting its targets for annual GDP growth for the past many years.

POLICY

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

VISION

Utilize all available resources for energy availability and efficient use in the province. Provide affordable energy to residential, industrial and commercial consumers. Support economic activities in province by providing sustainable and viable solution of energy.

OBJECTIVES / STRATEGIES

- 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 resources (e.g. solar, coal, biomass, wind and biogas) in power generation.
- Develop project to tap the run of the river/canal hydel potential.
- Develop enabling environment for private sector investment in Energy sector.

ACHIEVEMENTS OF FINANCIAL YEAR 2016-17

- Establishment of Quaid-e- Azam Thermal Pvt Ltd for construction of 1000~1200 MW RNLG based Power Plant at Bhikki Sheikhpura.
- Installation of 1698 AMI meters in Government electricity billing.
- Completion of feasibility study for Bio Mass Power Project.
- Completion of feasibility study for 5-Mini Hydel Power Project.
- Commencement of Energy Efficiency & Conservation Programme.
- Establishment of Project Management Unit in Energy Department.
- Commencement of feasibility study for energy solution using indigenous resources in villages.

NEW INITIATIVES

- Execution of Khadim-e-Punjab Ujala Programme to Solarize 20,000 schools in Punjab.
- Establishment of 1200 MW Re-Liquefied Gasified Natural Gas (RLNG) Power Plant
- Establishment of 15-20 MW Bio Mass Thermal Power Plant near Chak Jhumra, Faisalabad

- Construction of Energy Resource Centre to promote the energy efficiency culture and energy efficient buildings.
- Establishment of Mini Hydro Power Sites.
- Up gradation of Centre for Energy Research & and Development at UET Lahore to take up the emerging trends of industry and commercial uses as an aid to develop the standard codes.
- Installation of Net Meters at Public Buildings having already installed solar panels.
- Consultancy services on Oil & Gas Sector after 18th Amendment scenario

TARGETS FOR FINANCIAL YEAR 2017-18

- Completion of Renewable Energy Development Sector Investment Programme, hydel power generation project at Marala, Pakpattan, Chianwali, & Degout fall for adding 20 MW Energy to the National Grid.
- Installation of AMI Meters in Government Electricity billing.
- Provide enabling environment for private investment to develop Small, Mini & Micro Hydel Power Projects.
- Commencement of 135 MW Taunsa Hydel Power Project.
- Commencement of Bio Mass Power Project at Faisalabad.
- Commencement of Energy Resource Centre in Lahore.

TREND OF ALLOCATIONS

(Millions PKR)

SR.NO.	YEARS	ALLOCATION
1	2012-13	10,000
2	2013-14	20,431
3	2014-15	22,000
4	2015-16	16,000
5	2016-17	8,750
6	2017-18	9,000

OTHER DEVELOPMENT PROGRAMMES

- Allocation of Rs. 500 million for Establishment of 1200 MW Re-Liquefied Gasified Natural Gas (RLNG) Power Plant in Punjab

MTDF 2017-20
ENERGY: SUMMARY
DEVELOPMENT PROGRAMME 2017-18

(Million Rs.)

Sub-Sector	Local	F. Aid	Total
On-going Schemes			
Regular	2,991.592	544.000	3,535.592
Total: On-going Schemes	2,991.592	544.000	3,535.592
New Schemes			
Regular	4,901.058	0.000	4,901.058
Special Initiatives	63.350	0.000	63.350
Total: New Schemes	4,964.408	0.000	4,964.408
Other Development Program			
Miscellaneous	500.000	0.000	500.000
Total: Other Development Program	500.000	0.000	500.000
Total (Ongoing + New + ODP)	8,456.000	544.000	9,000.000

DEVELOPMENT PROGRAMME 2018-19

(Million Rs.)

Sub-Sector	Local	F. Aid	Total
On-going Schemes			
Regular	3,290.751	544.000	3,834.751
Total: On-going Schemes	3,290.751	544.000	3,834.751
New Schemes			
Regular	5,391.164	0.000	5,391.164
Special Initiatives	69.685	0.000	69.685
Total: New Schemes	5,460.849	0.000	5,460.849
Other Development Program			
Miscellaneous	550.000	0.000	550.000
Total: Other Development Program	550.000	0.000	550.000
Total (Ongoing + New + ODP)	9,301.600	544.000	9,845.600

DEVELOPMENT PROGRAMME 2019-20

(Million Rs.)

Sub-Sector	Local	F. Aid	Total
On-going Schemes			
Regular	3,619.826	544.000	4,163.826
Total: On-going Schemes	3,619.826	544.000	4,163.826
New Schemes			
Regular	5,930.280	0.000	5,930.280
Special Initiatives	76.654	0.000	76.654
Total: New Schemes	6,006.934	0.000	6,006.934
Other Development Program			
Miscellaneous	605.000	0.000	605.000
Total: Other Development Program	605.000	0.000	605.000
Total (Ongoing + New + ODP)	10,231.760	544.000	10,775.760

MTDF 2017-20 : Grand Total

29,621.360

ENERGY: SUMMARY

(Million PKR.)

Type / Sub Sector	No. of Schemes	Provision for 2017-18				Projection for 2018-19	Projection for 2019-20
		Capital	Revenue	Foreign Aid	G. Total (Cap+Rev)		
<u>ON-GOING SCHEMES</u>							
Regular	7	1,997.310	994.282	544.000	3,535.592	964.713	0.000
Total: ON-GOING SCHEMES	7	1,997.310	994.282	544.000	3,535.592	964.713	0.000
<u>NEW SCHEMES</u>							
Regular	14	750.000	4,151.058	0.000	4,901.058	13,290.000	0.000
Special Initiatives	1	0.000	63.350	0.000	63.350	0.000	0.000
Total: NEW SCHEMES	15	750.000	4,214.408	0.000	4,964.408	13,290.000	0.000
<u>OTHER DEVELOPMENT PROGRAMME</u>							
Miscellaneous	1	500.000	0.000	0.000	500.000	0.000	0.000
Total: OTHER DEVELOPMENT PROGRAMME	1	500.000	0.000	0.000	500.000	0.000	0.000
Grand Total	23	3,247.310	5,208.690	544.000	9,000.000	14,254.713	0.000

ENERGY

(Million PKR.)

GS No	Scheme Information Approval Date / Location	Est. Cost	Accum. Exp June,17	Provision for 2017-18			MTDF Projections		Throw fwd Beyond June, 2020
				Cap	Rev	G. Total (Cap+Rev)	2018-19	2019-20	
1	2	3	4	5	6	7	8	9	10

ON-GOING SCHEMES

Regular

8251	PC-II, Feasibility Study Consultancy for BioMass based Power Plant setup near wheat and rice produc Approved PDWP 08-11-2016 Faisalabad	151.484	47.050	0.000	104.484	104.484	0.000	0.000	0.000
8252	Project Management Unit Approved DDSC 2017/02/01 Lahore	309.600	0.000	0.000	144.798	144.798	164.802	0.000	0.000
8253	Reconciliation of Government Electricity Billing by Installing AMI Meters (Pilot Project) Approved DDSC 06-10-2016 Punjab	156.000	121.909	0.000	16.000	16.000	18.091	0.000	0.000
8254	Energy Efficiency & Conservation Programme Approved PDWP 15-12-15 Punjab	1,205.000	220.000	0.000	338.000	338.000	647.000	0.000	0.000
8255	Renewable Energy Development Sector Investment Programme (REDSIP) Approved ECNEC 07-11-13 Punjab	10,803.000	8,231.690	2,541.310	30.000	2,571.310	0.000	0.000	0.000
			Local:	1,997.310	30.000				
			Foreign:	544.000	0.000				
8256	Reconciliation of Government Electricity Billing by Installing AMI Meters (2nd Phase) Approved DDSC 06-10-16 Punjab	290.000	24.180	0.000	229.000	229.000	36.820	0.000	0.000
8257	Energy Solution Using Indiginous Resources In villages Approved DDSC 2016/09/02 Punjab	232.000	2.000	0.000	132.000	132.000	98.000	0.000	0.000
Sub-Total: Regular		13,147.084	8,646.829	2,541.310	994.282	3,535.592	964.713	0.000	0.000
Total: ON-GOING SCHEMES		13,147.084	8,646.829	2,541.310	994.282	3,535.592	964.713	0.000	0.000

NEW SCHEMES

Regular

8258	Construction of Energy Resource Center Un-Approved Lahore	1,200.000	0.000	500.000	0.000	500.000	700.000	0.000	0.000
8259	khadim e Punjab Ujala Program Central Punjab Un-Approved Lahore	4,000.000	0.000	0.000	1,000.000	1,000.000	3,000.000	0.000	0.000
8260	Upgrading of Center for Energy Research and Development at UET Lahore Un-Approved Lahore	73.500	0.000	0.000	73.500	73.500	0.000	0.000	0.000
8261	Establishment of 15,20 MW Bio Mass Thermal Power Plant near Chak Jhumra, Faisalabad Un-Approved Punjab	3,000.000	0.000	0.000	600.000	600.000	2,400.000	0.000	0.000
8262	Due Diligence & Updation of Feasibility Study of 4.16 MW Okara HPP on LBDC Near RD196 Un-Approved Punjab	12.966	0.000	0.000	12.966	12.966	0.000	0.000	0.000
8263	PC-II, Construction of Energy Resource Center Approved PDWP 2017.03.17 Punjab	100.000	0.000	0.000	100.000	100.000	0.000	0.000	0.000

ENERGY

(Million PKR.)

GS No	Scheme Information Approval Date / Location	Est. Cost	Accum. Exp June,17	Provision for 2017-18			MTDF Projections		Throw fwd Beyond June, 2020
				Cap	Rev	G. Total (Cap+Rev)	2018-19	2019-20	
1	2	3	4	5	6	7	8	9	10
8264	Due Diligence & Updation of Feasibility Study of 3.58 MW HPP on UCC Un-Approved Punjab	12.966	0.000	0.000	12.966	12.966	0.000	0.000	0.000
8265	PC II Consultancy Service on Position of Punjab In Oil & Gas Sector In The Post of 18th Amendment Scenario Un-Approved Punjab	10.000	0.000	0.000	10.000	10.000	0.000	0.000	0.000
8266	PC-II, Consultancy Services for Khadim e Punjab Ujala Program Approved PDWP 2017.03.24 Punjab	70.626	0.000	0.000	70.626	70.626	0.000	0.000	0.000
8267	Khadim e Punjab Ujala Program Northern Punjab Un-Approved Punjab	2,000.000	0.000	0.000	600.000	600.000	1,400.000	0.000	0.000
8268	Khadim e Punjab Ujala Program Southern Punjab Un-Approved Punjab	7,000.000	0.000	0.000	1,300.000	1,300.000	5,700.000	0.000	0.000
8269	Establishment of Mini Hydro Power Sites Un-Approved Punjab	600.000	0.000	250.000	350.000	600.000	0.000	0.000	0.000
8270	Resource Mapping of Hydro Power Potential of Potohar Region Un-Approved Punjab	110.000	0.000	0.000	20.000	20.000	90.000	0.000	0.000
8271	Installation of Net Meters at Public Buildings with already installed Solar Panels Un-Approved Punjab	1.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000
Sub-Total: Regular		18,191.058	0.000	750.000	4,151.058	4,901.058	13,290.000	0.000	0.000
Special Initiatives									
8272	Provision of Installation of Solar Power for Emine Erdogan Daanish Care Girls Schools, Basira, Muzaffargarh Un-Approved Muzaffargarh	63.350	0.000	0.000	63.350	63.350	0.000	0.000	0.000
Sub-Total: Special Initiatives		63.350	0.000	0.000	63.350	63.350	0.000	0.000	0.000
Total: NEW SCHEMES		18,254.408	0.000	750.000	4,214.408	4,964.408	13,290.000	0.000	0.000
OTHER DEVELOPMENT PROGRAMME									
Miscellaneous									
8273	Establishment of 1200 MW Re-Liquified Gasified Natural Gas (RLNG) Based Power Plant in Punjab Un-Approved Rahim Yar Khan	20,000.000	0.000	500.000	0.000	500.000	0.000	0.000	0.000
Sub-Total: Miscellaneous		20,000.000	0.000	500.000	0.000	500.000	0.000	0.000	0.000
Total: OTHER DEVELOPMENT PROGRAMME		20,000.000	0.000	500.000	0.000	500.000	0.000	0.000	0.000
Grand Total		51,401.492	8,646.829	3,791.310	5,208.690	9,000.000	14,254.713	0.000	0.000