

INSTITUTE OF STRATEGIC STUDIES

web: www.issi.org.pkphone: +92-920-4423, 24fax: +92-920-4658

Issue Brief

ENERGY PROJECTS UNDER CPEC

Junaid Ashraf, Young ISSI Professional*

March 09, 2017

^{*} Mr. Junaid Ashraf has done M.Phil. in Government and Public Policy from National Defence University, Islamabad, in year 2014. He is currently working under Young ISSI Professional Corner at the ISSI. His area of interests include China, CPEC, and Governance.

Sr. No	Project name	Energy Type	Location	Province	Capacity	Estimated cost (US \$ M)	Executed by (personnel mix)	Supervised by
1	Port Qasim Electric Company Coal fired	Coal (imported)	Port Qasim	Sindh	1320MW	1980	Sinohydro Resource Ltd & Al Mirqab	Private Power and Infrastructure Board (PPIB)
2	Sahiwal Coal-Fired Power Plant	Coal (Imported)	Sahiwal	Punjab	1320MW	1600	Huaneng Shandong Rui Group, China	Punjab Power Development Board (PPDB)
3	Engro Thar Coal Fired	Coal (Local)	Thar	Sindh	1320MW	2000	China Machinery Engineering Corporation (CMEC) & Engro Power Gen	Thar Coal Energy Board (TCEB)
4	Gwadar Coal/LNG/ oil Power Project	Coal (Imported) LNG/oil	Gwadar	Balochistan	300MW	600	undecided	Gwadar Port Authority (GPA) & Gwadar Development Authority (GDA)
5	Hubco Coal Power Plant	Coal (Imported)	Hub	Balochistan	660MW	970	hub power company	Private Power and Infrastructure Board (PPIB)
6	Rahimyar khan Coal Power Plant	Coal (Imported)	Rahimyar Khan	Punjab	1320MW	1600	Shanghai Electric Power Generation, China Machinery Engineering Corporation &Nishat Power Company	Punjab Power Development Board (PPDB)
7	SSRL Mine Mouth Power Project	Coal (Local)	Thar- Block 1	Sindh	1320MW	2000	Sino-Sindh Resources Limited	Thar Coal & Energy Board (TCEB)

CPEC-Energy Priority Projects

8	Quaid-E- Azam Solar Park Dawood	Solar Wind	Bahawalpur	Punjab Sindh	1000MW	1350	Hanenergy & QA Solar Power Company, Pakistan hydro china	Punjab Power Development Board (PPDB) & Alternative Energy Development Board (AEDB) Alternative
	Wind Farm							Energy Development Board (AEDB)
10	UEP Wind Farm	Wind	Jhimpir	Sindh	100MW	250	Hydro China (EPC), Gold Wind China (Supplier), & United Energy Pakistan (Pvt.) Ltd	Alternative Energy Development Board (AEDB)
11	Sachal Wind Farm	Wind	Jhimpir	Sindh	50MW	134	Hydro China &Arif Habib Corporation Limited	Alternative Energy Development Board (AEDB)
12	Suki Kinari Hydro Power	Hydel	River Kunar	КРК	870MW	1802	M/s Mott McDonald UK and M/s Coney Blair of France , Al Jomaih Holding company, (LLC) Riyadh, Saudi Arabia & Eden Inc. Berhad, Malaysia	Private Power and Infrastructure Board (PPIB)
13	Karot Hydro Power Station	Hydel	River Jhelum	AJK & Punjab	720MW	1420	M/s SMEC (Australia), China Three Gorges Corporation (CTGC) &	Private Power and Infrastructure Board (PPIB)

							M/S Associated Technologies (Pvt) Ltd	
14	Matiari to Lahore Trans- mission line	Electrode stations	Matiari to Lahore	Sindh & Punjab	2000MW	1500	China Electric Power Equipment and Technology Co.Ltd.(CET) & State Grid	National Transmission & Dispatch Company (NTDC)
15	Matiari to Faisalabad Trans- mission line	Electrode stations	Matiari to Faisalabad	Sindh & Punjab	2000MW	1500	China Electric Power Equipment and Technology Co.Ltd.(CET) & State Grid	National Transmission & Dispatch Company (NTDC)

CPEC-Energy Actively Promoted Projects

Sr. No	Project Name	Energy Type	Location	Province	Capacity	Estimated cost (US \$ M)	Executed by (Personnel Mix)	Supervised by
16	Gaddani Power Project	Coal	Gaddani	Balochistan	1320MW	3960	N/M	N/M
17	Hubco Coal Power Project	Coal (Imported)	Hub	Balochistan	660MW	970	hub power company	Private Power and Infrastructure board (PPIB)
18	Kohala Hydel Project	Hydel	River Jhelum	AJK	1100MW	2397	N/M	N/M
19	Pakistan Wind Farm II	Wind	Jhampir, Thatta	Sindh	100MW	150	N/M	N/M

20	Thar mine mouth oracle	N/M	Thar	Sindh	1320MW	1300	N/M	N/M
21	Muzaffar- garh Coal Power Project	Coal	Muzaffar- garh	Punjab	1320MW	1600	Undecided	Punjab Power Development Board (PPDB)

* Hubco coal power project is mentioned in both priority projects and actively promoted projects, so there are total 20 projects under CPEC.

Sr. No	Project Name	Energy Type	Location	Province	Capacity	Estimated cost (US \$ M)	Executed by (personnel mix)	Supervised by
1	Quaid-E- Azam Solar Park	Solar	Bahawalpur	Punjab	1000MW	1350	Hanenergy & QA Solar Power Company, Pakistan	Punjab Power Development Board (PPDB) & Alternative Energy Development Board (AEDB)
2	Dawood Wind Farm	Wind	Bhambore	Sindh	50MW	125	hydro china	Alternative Energy Development Board (AEDB)
3	UEP Wind Farm	Wind	Jhimpir	Sindh	100MW	250	Hydro China (EPC), Gold Wind China (Supplier), & United Energy Pakistan (Pvt.) Ltd	Alternative Energy Development Board (AEDB)
4	Sachal Wind Farm	Wind	Jhimpir	Sindh	50MW	134	Hydro China &Arif Habib Corporation Limited	Alternative Energy Development Board (AEDB)
5	Pakistan Wind Farm II	Wind	Jhampir, Thatta	Sindh	100MW	150	N/M	N/M

CPEC Renewable Energy Projects

IB

IB				ENE	RGY PROJECT	S UNDER CF	PEC March	n 09, 2017
6	Suki Kinari Hydro Power	Hydel	River Kunar	КРК	870MW	1802	M/s Mott McDonald UK and M/s Coney Blair of France , Al Jomaih Holding company, (LLC) Riyadh, Saudi Arabia & Eden Inc. Berhad, Malaysia	Private Power and Infrastructure Board (PPIB)
7	Karot Hydro Power Station	Hydel	River Jhelum	AJK & Punjab	720MW	1420	M/s SMEC (Australia), China Three Gorges Corporation (CTGC) & M/S Associated Technologies (Pvt) Ltd	Private Power and Infrastructure Board (PPIB)
8	Kohala Hydel Project	Hydel	River Jhelum	AJK	1100MW	2397	N/M	N/M

CPEC Coal Projects

Sr. No	Project Name	Energy Type	Location	Province	Capacity	Estimated Cost (US \$ M)	Executed by (personnel mix)	Supervised by
1	Port Qasim Electric Company Coal fired	Coal (imported)	Port Qasim	Sindh	1320MW	1980	Sinohydro Resource Ltd & Al Mirqab	Private Power and Infrastructure Board (PPIB)
2	Sahiwal Coal-Fired Power	Coal (Imported)	Sahiwal	Punjab	1320MW	1600	Huaneng Shandong Rui Group,	Punjab Power Development

	Plant						China	Board (PPDB)
3	Engro Thar Coal Fired	Coal (Local)	Thar	Sindh	1320MW	2000	China Machinery Engineering Corporation (CMEC) &Engro Power Gen	Thar Coal Energy Board (TCEB)
4	Gwadar Coal/LNG/ oil Power Project	Coal (Imported) LNG/oil	Gwadar	Balochistan	300MW	600	undecided	Gwadar Port Authority (GPA) &Gwadar Development Authority (GDA)
5	Hubco Coal Power Plant	Coal (Imported)	Hub	Balochistan	660MW	970	hub power company	Private Power and Infrastructure Board (PPIB)
6	Rahimyar khan Coal Power Plant	Coal (Imported)	Rahimyar Khan	Punjab	1320MW	1600	Shanghai Electric Power Generation, China Machinery Engineering Corporation &Nishat Power Company	Punjab Power Development Board (PPDB)
7	SSRL Mine Mouth Power Project	Coal (Local)	Thar-Block 1	Sindh	1320MW	2000	Sino-Sindh Resources Limited	Thar Coal & Energy Board (TCEB)
8	Gaddani Power Project	Coal	Gaddani	Balochistan	1320MW	3960	N/M	N/M

NERGY PROJECTS UNDER CPEC	Marc

9	Thar mine mouth oracle	N/M	Thar	Sindh	1320MW	1300	N/M	N/M
10	Muzaffar- garh Coal Power Project	Coal	Muzaffar- garh	Punjab	1320MW	1600	Undecided	Punjab Power Development Board (PPDB)

CPEC Province wise Projects

Sind	h					-		
Sr. No	Project Name	Energy Type	Location	Province	Capacity	Estimated cost (US \$ M)	Executed by (personnel mix)	Supervised by
1	Port Qasim Electric Company Coal fired	Coal (imported)	Port Qasim	Sindh	1320MW	1980	Sinohydro Resource Ltd & Al Mirqab	Private Power and Infrastructure Board (PPIB)
2	Engro Thar Coal Fired	Coal (Local)	Thar	Sindh	1320MW	2000	China Machinery Engineering Corporation (CMEC) &Engro Power Gen	Thar Coal Energy Board (TCEB)
3	SSRL Mine Mouth Power Project	Coal (Local)	Thar- Block 1	Sindh	1320MW	2000	Sino-Sindh Resources Limited	Thar Coal & Energy Board (TCEB)
4	Dawood Wind Farm	Wind	Bhambore	Sindh	50MW	125	hydro china	Alternative Energy Development Board (AEDB)
5	UEP Wind Farm	Wind	Jhimpir	Sindh	100MW	250	Hydro China (EPC), Gold Wind China (Supplier), & United Energy Pakistan (Pvt.) Ltd	Alternative Energy Development Board (AEDB)

IB

NERGY PROJECTS UNDER CPEC

6	Sachal	Wind	Ihimpir	Sindh		124	Hudro China	Altornativo
0	Sachal	wind	Jhimpir	Sinan	50MW	134	Hydro China	Alternative
	Wind Farm						&Arif Habib	Energy
							Corporation	Development
							Limited	Board (AEDB)
7	Matiari to	Electrode	Matiari to	Sindh &	2000MW	1500	China	National
	Lahore	stations	Lahore	Punjab			Electric	Transmission &
	Transmissi						Power	Dispatch
	on line						Equipment	Company
							and	(NTDC)
							Technology	
							Co.Ltd.	
							(CET) &	
							State Grid	
8	Matiari to	Electrode	Matiari to	Sindh &	2000MW	1500	China	National
	Faisalabad	stations	Faisalabad	Punjab			Electric	Transmission &
	Trans-						Power	Dispatch
	mission						Equipment	Company
	line						and	(NTDC)
							Technology	
							Co.Ltd.	
							(CET) &	
							State Grid	
9	Pakistan	Wind	Jhampir,	Sindh	100MW	150	N/M	N/M
	Wind Farm		Thatta					
	П							
10	Thar mine	N/M	Thar	Sindh	1320MW	1300	N/M	N/M
	mouth							
	oracle							

Punjab

Sr. No	Project Name	Energy Type	Location	Province	Capacity	Estimated cost (US \$ M)		Supervised by
1	Sahiwal Coal-Fired Power Plant	Coal (Imported)	Sahiwal	Punjab	1320MW	1600	Huaneng Shandong Rui Group, China	Punjab Power Development Board (PPDB)

-		- ·		.	40000	4		D
2	Rahimyar khan Coal Power Plant	Coal (Imported)	Rahimyar Khan	Punjab	1320MW	1600	Shanghai Electric Power Generation, China Machinery Engineering Corporation &Nishat Power Company	Punjab Power Development Board (PPDB)
3	Quaid-E- Azam Solar Park	Solar	Bahawalpur	Punjab	1000MW	1350	Hanenergy & QA Solar Power Company, Pakistan	Punjab Power Development Board (PPDB) & Alternative Energy Development Board (AEDB)
4	Karot Hydro Power Station	Hydel	River Jhelum	AJK & Punjab	720MW	1420	M/s SMEC (Australia), China Three Gorges Corporation (CTGC) & M/S Associated Technologies (Pvt) Ltd	Private Power and Infrastructure Board (PPIB)
5	Matiari to Lahore Trans- mission line	Electrode stations	Matiari to Lahore	Sindh & Punjab	2000MW	1500	China Electric Power Equipment and Technology Co.Ltd. (CET) & State Grid	National Transmission & Dispatch Company (NTDC)
6	Matiari to Faisalabad Trans- mission line	Electrode stations	Matiari to Faisalabad	Sindh & Punjab	2000MW	1500	China Electric Power Equipment and Technology Co.Ltd.	National Transmission & Dispatch Company (NTDC)

							(CET) & State Grid	
7	Muzaffar- garh Coal Power Project	Coal	Muzaffar- garh	Punjab	1320MW	1600	Undecided	Punjab Power Development Board (PPDB)

Balochistan

Sr. No	Project Name	Energy Type	Location	Province	Capacity	Estimated cost (US \$ M)	Executed by (personnel mix)	Supervised by
1	Gwadar Coal/LNG/ oil Power Project	Coal (Imported) LNG/oil	Gwadar	Balochistan	300MW	600	undecided	Gwadar Port Authority (GPA) &Gwadar Development Authority (GDA)
2	Hubco Coal Power Plant	Coal (Imported)	Hub	Balochistan	660MW	970	hub power company	Private Power and Infrastructure Board (PPIB)
3	Gaddani Power Project	Coal	Gaddani	Balochistan	1320MW	3960	N/M	N/M

КРК

Sr. No	Project Name	Energy Type	Location	Province	Capacity	Estimated cost (US \$ M)	Executed by (Personnel Mix)	Supervised by
1	Suki Kinari Hydro Power	Hydel	River Kunar	КРК	870MW	1802	M/s Mott McDonald UK and M/s Coney Blair of France , Al Jomaih Holding	Private Power and Infrastructure Board (PPIB)

IB	ENERGY PROJECTS UNDER CPEC March 09, 2017						
				com	bany,		
				(LLC)			
				Riyad			
				Saud	i		
				Arab			
				Eden			
				Berh			
				Mala	ysia		

AJK

Sr. No	Project Name	Energy Type	Location	Province	Capacity	Estimated cost (US \$ M)	Executed by (Personnel Mix)	Supervised by
1	Karot Hydro Power Station	Hydel	River Jhelum	AJK & Punjab	720MW	1420	M/s SMEC (Australia), China Three Gorges Corporation (CTGC) & M/S Associated Technologies (Pvt) Ltd	Private Power and Infrastructure Board (PPIB)
2	Kohala Hydel Project	Hydel	River Jhelum	AJK	1100MW	2397	N/M	N/M

GilgitBaltistan

No projects

Source of data

The data has been collected from the following link:

http://cpec.gov.pk/energy