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# Dawood 50MW Wind Farm

Last Updated – 16<sup>th</sup> August 2018

## Key Details

<b>Primary Energy Input</b>	Wind
<b>Technology</b>	Wind Turbine
<b>Installed Capacity (MW)</b>	49.5
<b>Tariff</b>	Upfront Tariff
<b>Location</b>	Bhanbore, Gharo, District Thatta
<b>Province</b>	Sindh
<b>Estimated Cost</b>	\$115 million
<b>Executing Company</b>	M/s Hydrochina Dawood Power Pvt. Limited
<b>Sponsors</b>	Hydrochina international company limited
<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	Powerchina Xibei Engineering company limited
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Alternative Energy Development Board
<b>Status</b>	Operational

Source: <http://cpec.gov.pk/project-details/11>

## Chronology

- 24 June 2013 - HydroChina International Engineering Company Limited Wang Youngqiang said that HydroChina Dawood Power Limited is planning a 50-megawatt wind energy project in Gharo<sup>1</sup>
- March 27, 2015 – Financial Closure was achieved
- April 5, 2017 – Commercial Operation Date

## Benefits

- Provide employment opportunities to the local people
- The project provides electricity to 100,000 households<sup>2</sup>
- 255 employees were employed in constructional phase
- 70 employees are employed during the operational phase<sup>3</sup>

<sup>1</sup> <https://www.dawn.com/news/1020529>

<sup>2</sup> <http://www.cpecinfo.com/news/cpec-project-updates-feb-2018/NDg2MQ==>

<sup>3</sup> <https://cpec-centre.pk/wp-content/uploads/2018/07/working-paper-028.pdf>

# UEP Wind Farm (Jhampir, Thatta)

Last Updated - 18<sup>th</sup> September 2018

## Key Details

<b>Primary Energy Input</b>	Wind
<b>Technology</b>	Wind Turbine
<b>Installed Capacity (MW)</b>	99
<b>Tariff</b>	Upfront
<b>Location</b>	Jhampir, District Thatta
<b>Province</b>	Sindh
<b>Estimated Cost</b>	252 million USD
<b>Executing Company</b>	UEP Wind Power Pvt. Limited
<b>Sponsors</b>	
<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Alternative Energy Development Board
<b>Status</b>	Operational

Source: <http://cpec.gov.pk/project-details/12>

## Chronology

- **30 March 2015** - Financial closure was achieved
- **16 June 2017** - Commercial Operations

## Benefits

- It is providing electricity to 500,000 households
- The project is annually generating 268,844 MWh of clean energy
- Provide job opportunities to the local communities

# Sachal Energy Wind Farm

Last Updated – 18<sup>th</sup> September 2018

## Key Details

<b>Primary Energy Input</b>	Wind
<b>Technology</b>	Wind Turbine
<b>Installed Capacity (MW)</b>	49.5
<b>Tariff</b>	Cost Plus Tariff
<b>Location</b>	Jhampir, District Thatta

<b>Province</b>	Sindh
<b>Estimated Cost</b>	134
<b>Executing Company</b>	Sachal Energy Development Pvt. Limited
<b>Sponsors</b>	Industrial and Commercial Bank of China
<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	Hydrochina international company limited
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Alternative Energy Development Board
<b>Status</b>	Operational

Source: <http://cpec.gov.pk/project-details/13>

### Chronology

- **28 April 2012** – Sachal Energy signed an engineering, procurement and construction contract and an operation and maintenance contract with Chinese company HydroChina Corporation Limited
- **27 February 2014** - Sachal Energy signed a power purchase agreement with National Electric Power Regulatory Authority
- **16 February 2015** – The Sachal Energy Development Limited has signed a financing agreement with the Industrial and Commercial Bank of China for the power plant.
- **June 2015** – Commissioning<sup>4</sup>
- **18 December 2015** – Financial closure was achieved
- **10 Apr 2017** – Commercial Operation started<sup>5</sup>

### Benefits

- It is providing electricity to 100,000 households<sup>6</sup>
- The project is annually generating 136,500MWh of clean energy

The power plant is reducing carbon dioxide emissions by approximately 85,000 tons.<sup>7</sup>

## Quaid-e-Azam Solar Park (Bahawalpur)

Last Updated – 9 October 2018

### Key Details

<b>Primary Energy Input</b>	Solar
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<sup>4</sup>

[http://www.moccc.gov.pk/moclc/userfiles1/file/CDM%20Projects/Three%20Gorges%20Third%20Wind%20Farm%20Pakistan%20\(Pvt%20Ltd%2049%205%20MW%20Wind%20Power%20Plant%20Project%20in%20Jhampir,%20District%20Thatta%20Sindh,%20Pakistan.pdf](http://www.moccc.gov.pk/moclc/userfiles1/file/CDM%20Projects/Three%20Gorges%20Third%20Wind%20Farm%20Pakistan%20(Pvt%20Ltd%2049%205%20MW%20Wind%20Power%20Plant%20Project%20in%20Jhampir,%20District%20Thatta%20Sindh,%20Pakistan.pdf)

<sup>5</sup> <https://tribune.com.pk/story/1414390/sachals-wind-power-project-starts-production/>

<sup>6</sup> <http://www.cpecinfo.com/news/cpec-project-updates-feb-2018/NDg2MQ==>

<sup>7</sup> <https://www.dawn.com/news/1163884>

<b>Technology</b>	PV Solar
<b>Installed Capacity (MW)</b>	300 MW
<b>Tariff</b>	Cost plus
<b>Location</b>	Bahawalpur
<b>Province</b>	Punjab
<b>Estimated Cost</b>	\$460million
<b>Executing Company</b>	APPOLO & BEST & CREST
<b>Sponsors</b>	ZONERGY
<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	MCC
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Punjab Power Development Board / Alternative Energy Development Board
<b>Status</b>	Operational

Source: <http://cpec.gov.pk/project-details/10>

### Chronology

- **May 2013** - A concept paper to Punjab Chief Minister was presented to set up the project
- **August 2013** – The first MoU for the project was signed between the governments of China and Punjab
- **31 August 2013** – Punjab Chief Minister Shahbaz Sharif, while chairing Punjab Energy Council, approved the master plan for the development of the project.
- **10 September 2013** - Punjab Energy Council gave approval to setting up of Quaid-e-Azam Solar Park at Lal Sohanra and Din Garh in Bahawalpur district.<sup>8</sup>
- **17 June 2014** – Chinese PV manufacturer and system integrator, TBEA SunOasis, has won contracts for the engineering, procurement and construction as well as operations and maintenance<sup>9</sup>
- **July 2014** – Punjab government signed MoU with a private Chinese developer for setting up a solar plant in the park
- **July 2014** – Project Commitment Agreement was signed. Both parties agreed to Rs. 14 per unit tariff outside of taxes
- **August 2014** – The project was placed on the early harvest list
- **September 2014** – Punjab Power Development Board issued a letter of interest
- **23 September 2014** - Punjab Power Development Board issued a letter to ZONERGY to conduct a feasibility of the project.<sup>10</sup>
- **10 October 2014** – Punjab government issued a letter of interest for setting up the project to ZONERFY.<sup>11</sup>
- **October 2014** – First equipment arrives at site
- **November 2014** – Construction and installation starts at site

<sup>8</sup> <https://nation.com.pk/11-Sep-2013/quaid-e-azam-solar-park-approved>

<sup>9</sup> [https://www.pv-tech.org/news/chinese\\_firm\\_wins\\_pakistan\\_mega\\_solar\\_project\\_contracts](https://www.pv-tech.org/news/chinese_firm_wins_pakistan_mega_solar_project_contracts)

<sup>10</sup> <https://tribune.com.pk/story/773170/letter-of-interest-punjab-hiring-it-firm-for-solar-project/>

<sup>11</sup> <https://tribune.com.pk/story/773170/letter-of-interest-punjab-hiring-it-firm-for-solar-project/>

- **January 2015** – Construction and installation completed
- **22 January 2015** – NEPRA announced a revised upfront tariff at Rs. 14 per unit for the first 10 years of solar projects
- **February 2015** – Testing and commissioning
- **27 March 2015** – The project started supplying electricity to the national grid
- **April 2015** – Land allotment for the first batch of 300 MW was completed
- **April 2015** – The first unit of the park reportedly went into test run and achieved successful results.<sup>12</sup>
- **5 May 2015** – Prime Minister Nawaz Sharif and Punjab Chief Minister Shahbaz Sharif formally inaugurated the park.<sup>13</sup>
- **27 June 2015** – Pakistan and China agreed to complete the project work by 2016. Punjab Chief Minister Shahbaz Sharif said that 300 MW of electricity will be generated from the plant by the end of the year.<sup>14</sup>
- **July 2015** – Grid interconnectedness for both projects was completed and submitted to the National Transmission and Dispatch Company for approval, a requirement for all private power projects.
- **4 July 2015** - Prime Minister Nawaz Sharif has directed concerned authorities to complete the project by April 2016.<sup>15</sup>
- **17 August 2015** – The project sponsors received approval from NTDC
- **July 2016** – COD attained

### Benefits

- The life expectancy of the project is 25 years.
- The predicted profit from the project over the life expectancy estimated at \$21.95 million.
- The project is expected to avoid about 280,000 tonnes of carbon dioxide each year.<sup>16</sup>

## Coal-Fired Power Plants at Port Qasim Karachi

Last Updated – 7<sup>th</sup> August 2018

### Key Details

<sup>12</sup> <https://www.dawn.com/news/1180113>

<sup>13</sup> <https://www.dawn.com/news/1180113>

<sup>14</sup>

<https://tribune.com.pk/story/910732/bahawalpur-solar-power-park-project-to-be-completed-by-2016-punjab-cm/>

<sup>15</sup> <https://www.dawn.com/news/1192334>

<sup>16</sup>

<https://www.reuters.com/article/us-pakistan-solar-energy/solar-scale-up-in-pakistan-hits-roadblock-after-payments-slashed-idUSKCN11P1IE>

<b>Primary Energy Input</b>	Coal (Imported from Indonesia, South Africa and Australia)
<b>Technology</b>	Super Critical
<b>Installed Capacity (MW)</b>	1320
<b>Location</b>	Port Qasim
<b>Province</b>	Sindh
<b>Estimated Cost</b>	\$2.085 billion
<b>Executing Company</b>	Port Qasim Electric Power Company (Private) Limited
<b>Sponsors</b>	51% - Powerchina Resources (a subsidiary of PowerChina)  49% - Al Mirqab Capital (a subsidiary of Al Mirqab Holding)
<b>Financing</b>	Independent Power Producer (IPP)
<b>Contractors</b>	<ul style="list-style-type: none"> <li>• <b>Site Selection and Site Survey</b> - SEPCO III Electric Power Construction (SEPCO III) and Hebei Electric Power Design and Research Institute (HBED) [Engaged by Power China]</li> <li>• <b>Boilers</b> -Doosan Babcock &amp; Harbin</li> <li>• <b>Generators</b> - Dongfang Electric Corporation</li> <li>• <b>Coal unloading jetty and channel</b> - Sinohydro Harbour</li> <li>• <b>Management Consulting (supervision) services for the coal unloading jetty</b> - Consultant and Construction Supervision (a subsidiary of CCCC Second Harbor Consultants)</li> </ul>
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Private Power and Infrastructure Board (PPIB)
<b>Status</b>	Completed

Source: <http://cpec.gov.pk/project-details/1>

### Chronology

- 17 June 2014 - Sindh Environmental Protection Agency granted approval of environmental impact assessment of the power plant after detailed evaluation procedures.
- 30 January 2015 - Sindh Environmental Protection Agency granted approval of environmental impact assessment of the jetty after detailed evaluation procedures.<sup>17</sup>

<sup>17</sup> <http://www.cpecinfo.com/news/port-qasim-coal-fired-power-project/MTYxOA==>

- 13 February 2015 – The National Electric Power Regulatory Authority approved 8.12 cents/unit upfront levelised tariff for power plant for 30 years.<sup>18</sup>
- April 2015 –Project Company signed Implementation Agreement with Government of Pakistan, signed Power Purchase Agreement with NTDC.
- 7 May 2015 –Massive construction works commenced.
- 12 August 2015 – Massive construction of the Jetty and the Channel, which are included as part of the power plant, started.
- December 2015 – Financial closing achieved with Export-Import Bank of China (China EXIM Bank).
- 10 November 2017 – The synchronization of the first unit was successfully achieved 50 days ahead of schedule.<sup>19</sup>
- 29 November 2017 – The first 660 MW unit was inaugurated by Prime Minister Shahid Khaqan Abbasi.<sup>20</sup>
- January 2018 - The second 660 MW unit of Port Qasim project was connected to the grid
- 25 April 2018 – Commercial Operations Date achieved. Although, the project was scheduled to be completed by June 2018, but the project was successfully completed 67 days ahead of schedule.

## Benefits

- The Project directly creates over 5000 job opportunities to Pakistani engineers and labors during construction period, and annually creates around 600 job opportunities to Pakistani manpower during operation period.
- Full payment of all taxes and promote the increasing of local fiscal income.
- Project adopts the world’s leading supercritical thermal technology, environmentally friendly operation including seawater desalination and flue gas desulfurization will help saving the freshwater, and preventing the surrounding marine ecosystem of the Project from the damages and hazards.
- Annual energy output is around 9000GWh after COD, which is able to support more than 4 million families’ daily power consumption and will help relieving the power shortage

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<sup>18</sup> <https://www.dawn.com/news/1163424>

<sup>19</sup> <https://propakistani.pk/2017/11/30/first-unit-port-qasim-coal-fired-power-plant-inaugurated/>

<sup>20</sup> <https://www.thenews.com.pk/print/250848-pm-opens-over-1-300-mw-port-qasim-coal-fired-power-project>



# Sahiwal Coal-Fired Power Plant

Last Updated – 8<sup>th</sup> August 2018

## Key Details

<b>Primary Energy Input</b>	Coal (Imported from Indonesia and South Africa) <sup>21</sup>
<b>Technology</b>	Super Critical
<b>Installed Capacity (MW)</b>	1320
<b>Location</b>	Sahiwal
<b>Province</b>	Punjab
<b>Estimated Cost</b>	\$1.8 billion
<b>Executing Company</b>	Huaneng Shandong Ruyi Energy Pakistan (Private) Limited.
<b>Sponsors</b>	Huaneng Shandong and Shandong Ruyi
<b>Financing</b>	Independent Power Producer
<b>Contractor</b>	SEPCO 2
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Punjab Power Development Board
<b>Status</b>	Operational
<b>Date of Completion</b>	May 2017

Source: <http://cpec.gov.pk/project-details/2>

## Chronology

- 30 May 2014 – Prime Minister Nawaz Sharif performed the ground breaking of the project.<sup>22</sup>
- 31 July 2015 – First Concrete pouring ceremony was done
- 8 June 2017 – Both units of the project completed 168 hours full-load test run.
- February 2017 – The project achieved its financial close.
- 24 January 2017 – Minister for Water and Power Khawaja Asif said that the power plant was connected to the national grid.
- May 2017 – The first unit was inaugurated by Prime Minister Nawaz Sharif.
- 24 May 2017 – The first unit of the plant passed 168 hours of full load test run, becoming the first operational coal-fired generating unit under CPEC.
- 3 July 2017 – The second unit of the power plant was completed and was put into operation, marking the first major energy project under the CPEC framework was officially put into

<sup>21</sup> <https://nation.com.pk/12-Jun-2017/sahiwal-coal-power-plant>

<sup>22</sup> <https://www.dawn.com/news/1109535>

operation. The project was completed 22 days ahead of internal control milestone plan and 200 days ahead of the contract period.<sup>23</sup> The project was completed in a record period of 22 months.<sup>24</sup>

- 27 October 2017 – The power plant was approved to being commercial operation by NEPRA after passing 10 acceptance tests.<sup>25</sup> Subsequently, Pakistani Central Power Purchasing Bureau issued a letter for commercialization, marking the official commercialization of the plant.<sup>26</sup> 28 October 2017 marked the start of commercial operation.

## Benefits

- During the construction phase, all the raw materials was bought from the local market.
- Furniture for the project is being brought from the market of Sahiwal.<sup>27</sup>
- The chimneys of the plant are built 180 meter to ensure safe emissions of gases.<sup>28</sup>
- More than 200 Pakistani engineers have been recruited for operational phase. These engineers received systematic training for such power plants in China.<sup>29</sup>

## Expected Benefits

- The project can produce over nine billion KWh per annum
- It can satisfy the electricity demand of 10 million people
- The project is expected to fill 25 percent of the power deficit in Pakistan.<sup>30</sup>
- According to *The News*, the project employed over 4,000 workers which include 1,000 Chinese workers as of March 2016.
- The project will not have any adverse effects on the overall environment and infrastructure due to which in which it is designed and engineered. Environment friendly technologies like FGD & ESP are used.
- The construction of the railway link, which will originate from the village Yusuf Wala, will contribute in providing a long term commercial activity to Pakistan Railways due to coal transportation.<sup>31</sup>
- During the operation phase, the water consumption from the Lowe Bari Doab for the power project will be only 29 cusecs; not having significant effect on farmers.
- The overall water usage is less than 60,000 m<sup>3</sup> per day.
- The imported coal used for the plant will contain low sulfur content in order to ensure emissions are more environment friendly.

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<sup>23</sup> <https://nation.com.pk/03-Jul-2017/second-unit-of-sahiwal-power-plant-being-inaugurated-today>

<sup>24</sup>

<https://www.thenews.com.pk/print/299722-sahiwal-coal-fired-power-plants-feared-closure-on-non-payment-of-dues>

<sup>25</sup> [http://en.powerchina.cn/2017-10/27/content\\_35686940.htm](http://en.powerchina.cn/2017-10/27/content_35686940.htm)

<sup>26</sup> <http://www.chng.com.cn/eng/n75861/n75939/c39638807/content.html>

<sup>27</sup>

<https://www.pakistantoday.com.pk/2016/05/07/sahiwal-coal-power-project-set-to-become-first-cpec-project-to-be-completed/>

<sup>28</sup> <https://www.thenews.com.pk/print/106311-Sahiwal-coal-power-project-power-to-people>

<sup>29</sup> <http://www.cpecinfo.com/news/sahiwal-coal-fired-power-plant-energy-project/MTYxOQ==>

<sup>30</sup> <https://nation.com.pk/03-Jul-2017/second-unit-of-sahiwal-power-plant-being-inaugurated-today>

<sup>31</sup> <https://www.thenews.com.pk/print/106311-Sahiwal-coal-power-project-power-to-people>

- 30,000+ saplings will be planted in the vicinity of the plant to improve the ecosystem of the area.
- A technical training school will be established to train local youth, enhance local labour skills and promote employment opportunities for Sahiwal and surrounding area.<sup>32</sup>

## China-Pakistan Friendship School, Faqueer

<b>Location</b>	Gwadar district, Balochistan
<b>Province</b>	Balochistan
<b>Estimated Cost (US \$ Million)</b>	0.399
<b>Financing</b>	Grant from Chinese Government
<b>Status</b>	Completed

### Chronology

- November 2015 - construction started
- September 2016 - Project Completed

### Benefits

- The friendship school provides educational opportunities for 500 local students every year.

## CPEC Emergency Medical Center in Gwadar

<b>Location</b>	Gwadar district, Balochistan
<b>Province</b>	Balochistan
<b>Estimated Cost (US \$ Million)</b>	1.6
<b>Financing</b>	Grant from Chinese Government
<b>Status</b>	Completed

### Chronology

- 17 May 2017. the CPEC Emergency Medical Center in Gwadar is in operation.

<sup>32</sup> <http://www.chng.com.cn/eng/n75861/n75939/c39638807/content.html>

# Cross Border Optical Fiber Cable

Last Updated – 5<sup>th</sup> October 2018

## Key Details

<b>Location</b>	Gilgit Baltistan, Khyber Pakhtunkhwa, Punjab
<b>Province</b>	Gilgit Baltistan, Khyber Pakhtunkhwa, Punjab
<b>Estimated Cost (US \$ Million)</b>	44
<b>Financing</b>	85% - EXIM bank of China 15% - Pakistani government
<b>Status</b>	Completed

Source: <http://cpec.gov.pk/project-details/40>

## Chronology

- **January 2014** – The project was signed between Special Communication Organization of Pakistan and Huawei
- **19<sup>th</sup> May 2016** – Groundbreaking of the project took place in Gilgit
- **June 2018**-Project completed
- **13<sup>th</sup> July 2018** – Prime Minister inaugurated the project<sup>33</sup>

## Benefits

- The project will help in improving the telecom and ICT industry
- It will also promote tourism in the country
- Trading opportunities for northern areas of the country will be created
- It will also provide the ICT infrastructure for 3G/4G services in the northern areas
- The communication security will be enhanced through the alternative fibre route<sup>34</sup>
- The fiber optic cable will provide Pakistan with a direct telecom access to China, Central Asian States and from there to Europe and to and from the United States.<sup>35</sup>
- The project will help in lowering Pakistan’s dependence on the submarine cable<sup>36</sup>
- It would provide China with alternate and shorter access for transit telecom traffic to Europe, Middle East and Africa<sup>37</sup>
- For Gilgit Baltistan, the project will prove as a major source of revenue and employment, facilitate trade, tourism and increase awareness about IT sector.<sup>38</sup>

<sup>33</sup> <http://cpec.gov.pk/project-details/40>

<sup>34</sup> <http://cpec.gov.pk/project-details/40>

<sup>35</sup> <https://propakistani.pk/2018/02/09/pak-china-optical-fiber-cable-project-go-live-2018/>

<sup>36</sup> <https://tribune.com.pk/story/1757214/2-caretaker-pm-rolls-pak-china-optical-fiber-cable-project/>

<sup>37</sup> <https://www.thenews.com.pk/print/341417-pm-inaugurates-pak-china-optic-fiber-cable>

<sup>38</sup> <https://pakodia.pk/pak-china-optic-fiber-project-2018/>

# Feasibility study for Upgradation of ML1 and Establishment of Havelian Dryport of Pakistan Railways

<b>Location</b>	Karachi to Peshawar via Hyderabad, Nawabshah, Rohri, RahimyarKhan, Bahawalpur, Khanewal, Sahiwal, Lahore, Gujrawala, Rwalpindi, Peshwar
<b>Province</b>	Khyber Pakhtunkhwa, Panjab, Sindh
<b>Estimated Cost</b>	\$3 million
<b>Executing Company</b>	China Railway Eryuan Engineering Group CO.LTD
<b>Financing</b>	Pakistani Government
<b>Status</b>	Completed

## Chronology

- April 2015- contract signed for feasibility study.
- August 2015- Pakistani government reviewed the feasibility study draft.
- January 2016- feasibility study completed

# Three Gorges Second and Third Wind Power Projects

Last Updated - 9 October 2018

## Key Details

<b>Primary Energy Input</b>	Wind
<b>Technology</b>	Wind Turbine
<b>Installed Capacity (MW)</b>	99 (2x49.5)
<b>Tariff</b>	Upfront Tariff
<b>Location</b>	Jhampir, Thatta
<b>Province</b>	Sindh
<b>Estimated Cost</b>	224mln
<b>Executing Companies</b>	Three Gorges Second Wind Farm Pakistan Ltd.

	(TGSWF) & Three Gorges Third Wind Farm Pakistan Pvt. Ltd. (TGTWF)
<b>Sponsors</b>	China Three Gorges South Asia Investment Ltd.
<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	Shanghai Investigation Design & Research Institute Co. Ltd. /Sumec Group Corporation Company Limited
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Alternative Energy Development Board
<b>Status</b>	Operational

Source: <http://cpec.gov.pk/project-details/24>

## Chronology

- **21<sup>st</sup> May 2013** – EPA Sindh issued NOC for Initial Environmental Examination(IEE)
- **16<sup>th</sup> April 2014** – National Transmission and Despatch Company approved Interconnection Study Report
- 
- **1<sup>st</sup> April 2016** – NEPRA approved Upfront Tariff
- **19<sup>th</sup> April 2016** - Shanghai Investigation Design & Research Institute Co., Ltd, China was hired under an EPC Contract for Engineering & Construction
- **4<sup>th</sup> July 2016** - Lahmeyer International GmbH has been assigned as owners engineer to assist during the design and implementation phase.<sup>39</sup>
- **1<sup>st</sup> August 2016** – Issuance of LOS
- **21<sup>st</sup> October 2016** – Completion of Project Document Design<sup>40</sup>
- **30<sup>th</sup> November 2016** – Environmental Protection Assessment initialed
- **15<sup>th</sup> December 2016** – Signing of EPA
- 15th February 2017– Addendum IEE report submitted to SEPA.
- **17<sup>th</sup> March 2017** – Financial closure was achieved<sup>41</sup>
- **30<sup>th</sup> June 2018** – Commercial Operationalization of Three Gorges Second Wind Farm
- **9<sup>th</sup> July 2018** - Commercial Operationalization of Three Gorges Third Wind Farm
- 20th June 2018 – Commercial Operationalization of Three Gorges Second Wind Farm
- **9<sup>th</sup> June 2018** - Commercial Operationalization of Three Gorges Third Wind Farm

## Benefits

<sup>39</sup>

<https://www.lahmeyer.de/en/projects/energy/wind-energy/single/article/495-mw-three-gorges-second-wind-farm-and-495-mw-three-gorges-third-wind-farm-pakistan/>

<sup>40</sup>

[http://mocc.gov.pk/moclc/userfiles1/file/CDM%20Projects/Three%20Gorges%20Second%20Wind%20Farm%20Pakistan%20Ltd%2049\\_5%20MW%20Wind%20Power%20Plant%20Project%20in%20Jhampir,%20District%20Thatta%20Sindh,%20Pakistan.pdf](http://mocc.gov.pk/moclc/userfiles1/file/CDM%20Projects/Three%20Gorges%20Second%20Wind%20Farm%20Pakistan%20Ltd%2049_5%20MW%20Wind%20Power%20Plant%20Project%20in%20Jhampir,%20District%20Thatta%20Sindh,%20Pakistan.pdf)

<sup>41</sup> <http://ctgsail.com/bussiness/99-MW-THREE-GORGES-2ND-AND-3RD-WIND-FARM>

- During the various periods of construction, 1,200 new jobs were provided to local populace. Similarly, 70 employment opportunities were created during the operational phase.<sup>42</sup>

## KKH Phase II (Thakot -Havelian Section)

Last Updated – 12<sup>th</sup>November2018

### Key Details

<b>Location</b>	Thakot -Havelian Khyber Pakhtunkhwa
<b>Province</b>	Khyber Pakhtunkhwa
<b>Estimated Cost</b>	\$1,315 million
<b>Executing Company</b>	China Communications Construction Company Ltd
<b>Financing</b>	China Exim bank
<b>Contractors</b>	China Communications Construction Company Ltd
<b>Supervising Agency</b>	Ministry of Communications, Government of Pakistan
<b>Implementing Agency</b>	National Highway Authority
<b>Status</b>	In progress

**Source:** <http://cpec.gov.pk/project-details/1>

### Chronology

- April 20th 2015, the Government of the People’s Republic of China and the Government of the Islamic Republic of Pakistan have signed the framework agreement on this project.
- June 15th 2015, National Highway Authority has initiated the bid process of the project.
- December 22th 2015, National Highway Authority, Government of Pakistan and China Communications Construction Company Limited have signed the contract agreement of KKH Phase-II (Havelian–Thakot) project.
- April 28th, 2016, KKH Phase-II (Havelian – Thakot) project held the groundbreaking ceremony. Meanwhile, China EXIM Bank and Government of the Islamic Republic of Pakistan signed the loan agreement of KKH Phase-II (Havelian–Thakot) project.
- September 1<sup>st</sup> 2016, the work of the project was commenced.
- Till October of 2018, the accumulative financial progress was USD 842.258 million, achieving the progress of 64.04% , the construction work on this project is progressing well.

### Benefits

- Provided jobs to over 7000 locals

<sup>42</sup> [http://europe.chinadaily.com.cn/business/2016-07/04/content\\_25958891.htm](http://europe.chinadaily.com.cn/business/2016-07/04/content_25958891.htm)

- Boost connectivity
- Convenience in transport
- Sustain a flailing tourism sector.



# Peshawar-Karachi Motorway (Multan-Sukkur Section)

Last Updated – 2<sup>nd</sup> October 2018 (In progress)

## Key Details

<b>Location</b>	Province of Punjab and Sindh
<b>Province</b>	Punjab and Sindh
<b>Estimated Cost</b>	\$2,889 million
<b>Executing Company</b>	China State Construction Engineering Corporation
<b>Financing</b>	Government Concessional Loan(GCL) Export-Import Bank of China
<b>Contractors</b>	China State Construction Engineering Corporation
<b>Supervising Agency</b>	Ministry of Communications, Government of Pakistan
<b>Implementing Agency</b>	National Highway Authority
<b>Status</b>	In progress

**Source:** <http://cpec.gov.pk/project-details/1>

## Chronology

- May 2016 – Prime Minister Nawaz Sharif performs groundbreaking of Multan-Sukkur motorway.<sup>43</sup>
- August 5, 2016 – Project officially started.<sup>44</sup>
- May 26, 2018 - Prime Minister Shahid Khaqan Abbasi inaugurated a 33 km section (Multan-Shujaabad) located at the north end of the project.
- September 2018 - General Manager of the project, Arbab Ali said that the 392-kilometer Sukkur-Multan section of Motorway is likely to be opened for traffic by May next year, two months ahead of the given schedule of August 04, 2019.<sup>45</sup>

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<sup>43</sup> <http://dunyanews.tv/en/Pakistan/335537-PM-Nawaz-performs-groundbreaking-of-MultanSukkur->

<sup>44</sup>

<https://nation.com.pk/24-Sep-2018/multan-sukkur-motorway-project-employs-23000-local-residents>

<sup>45</sup> <https://pakobserver.net/multan-sukkur-motorway-project-to-be-completed-before-time/>

## Benefits

- Sukkur-Multan has a design speed of 120 km per hour, and it is a two-way six-lane road.<sup>46</sup>
- The project offered job opportunities to over 23000 locals living along the motorway.<sup>47</sup>

## Orange Line – Lahore

### Key Details

<b>Location</b>	Lahore
<b>Province</b>	Punjab
<b>Cost</b>	The total project price is \$1.626 billion including \$0.5317 billion civil work, \$0.9225 billion E&M work ( track work and 135 metro cars included in E&M system), \$0.1478 billion contingencies, \$ 24 million consulting fee.
<b>Executing Companies</b>	Habib Construction Service  Zahid Khan & Brothers Reliable  Sarwar & company (PVT) Limited  China Railway Corporation and China North Industries Corporation Joint Venture (CR-NORINCO )
<b>Financing</b>	China's Exim Bank
<b>Status</b>	In progress

Source: <http://cpec.gov.pk/project-details/1>

### Chronology

- May,2014- the frame agreement on Lahore Orange Metro Line was signed between Chinese government and Pakistan government. The agreement mentioned that Chinese government will provide financing loan for the project with E&M Equipment from China.

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<sup>46</sup> <https://pakobserver.net/multan-sukkur-motorway-project-to-be-completed-before-time/>

<sup>47</sup>

<https://www.urdupoint.com/en/pakistan/multan-sukkur-motorway-project-employs-23000-438516.html>

- April 20,2015- the Commercial Contract was signed between Punjab Masstransit Authority (PMA) and CR-NORINCO.
- August 25, 2015- Supplementary Agreement for Subletting of Civil Works was also signed between Punjab Mass Transit Authority (PMA) and CR-NORINCO, subletting of the civil work to PMA further providing that LDA will be the Executing Agency for Civil works of the Project who will appoint Civil contractors to carry out the Civil Works. The LDA divided Civil Works into four packages and awarded the contracts to Habib Construction Service (One Package), ZKB & Reliable Joint Venture (Two Packages) and Sarwar & company (PVT) Limited (One Package).
- October 25, 2015 – The Civil Works were started.
- December,21,2015- the finance loan agreement was been signed between Chinese EXIM Bank and Government of Pakistan.
- January, 2016- the Civil Works of the project were suspended within 200 feet of 11 heritage sites under Court orders.
- September, 2016, the first batch of E&M good arrived in Lahore.
- October 8, 2017- the first batch of metro train arrived in Lahore.
- December 8, 2017- the Supreme Court (SC) set aside the decision of the Lahore High Court (LHC) and allowed resumption of Civil Works at the 11 locations subject to several important conditions which have been met.
- February, 2018, testing running succeeded from No 1 station to No 4 station.
- May, 2018, testing running succeeded from No 1 station to No 11 station and No 18 station to No 26 station.
- August 30, 2018, the Supreme Court (SC) held hearing on Orange Line and after obtaining affidavits from the Contractors fixed the project completion date as 30-07-2019.
- The project is now progressing satisfactorily under regular monitoring by Honorable supreme court of Pakistan.

### **Benefits**

- According to the feasibility study, the Orange Line train will have a daily ridership of 245,000 passengers per day which is expected to rise in the following years.

- It is designed to handle 30,000 passengers per hour per direction. Each train car has a capacity to carry 200 passengers and each train set will have carrying capacity of 1000 passengers. The train is automated with a driver.<sup>48</sup>
- The project will not only transform the public transportation system but will also help in resolving traffic woes that are being faced by the inhabitants of the city. With population of the city increasing at a rapid pace, the availability of quality public transport is essentially required.<sup>49</sup>
- The project is designed in a way that minimum land acquisition is required. The overall length of Line is 27.12 kilometers out of which 25.4 km is elevated viaduct and 1.72 km is underground (cut and cover section). There are 24 elevated stations and 2 underground stations along the route.
- The Orange Line Metro Train is Priority 2 Line which will compliment the Priority 1 Green Line already operating in Lahore as Metrobus. The project contributes to development of mass transit network in Lahore.

## Gwadar East-Bay Expressway

Last Updated – 25<sup>th</sup> September 2018

### Key Details

<b>Location</b>	Gwadar district, Balochistan
<b>Province</b>	Balochistan
<b>Estimated Cost</b>	\$ 143.75million
<b>Executing Company</b>	Contracting company on the basis of EPC under CPEC
<b>Financing</b>	Government Interest Free Loan
<b>Contractors</b>	China Communications Construction Company
<b>Supervising Agency</b>	Ministry of Maritime Affairs, Government of Pakistan Gwadar Port Authority
<b>Status</b>	Under Construction

**Source:** <http://cpec.gov.pk/project-details/1>

### Chronology

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<sup>48</sup>

<https://dailytimes.com.pk/246642/will-orange-line-metro-train-be-just-as-helpful-as-the-metro-bus/>

<sup>49</sup> <https://pakobserver.net/orange-line-metro-train-2/>

- 12 January 2015 – The project was approved by the Executive Committee of the National Economic Council (ECNEC) at the rationalized cost of Rs 14.061 billion including Foreign Exchange Component (FEC) Rs 13.542.59 billion, equivalent to US \$134.254 million approximately<sup>50</sup>
- 10 May 2017 - The CDWP - (Central Development Working Party) recommended the proposal for signing of interest-free loan as a CPEC project with government of China at the investment control cost of US \$168 million (equivalent to RMB 1.1 billion approximately) for consideration of ECNEC
- 10 May 2017 - The Executive Committee of the National Economic Council (EcneC) has given approval to signing of an interest-free loan of US \$168 million with China for the construction of Expressway on East Bay of Gwadar. <sup>51</sup>
- 24 September 2017 –EPC Contract Agreement signed between Gwadar Port Authority and China Communications Construction Company.<sup>52</sup>
- 7 November 2017 – The PC-II for feasibility study for construction of Phase-II Eastbay Expressway was submitted to Planning Commission for approval on November 7, 2017, asking that Chinese side may be requested to provide interest free loan.<sup>53</sup>
- 22 November 2017 – Prime Minister Shahid Khaqan Abbasi performed the ground breaking of the East Bay Expressway.<sup>54</sup>
- 2020 – Project set to be completed by 2020

## Benefits

- The project ought to help generate economic activity.<sup>55</sup>
- The 19.981 km, four-lane road with six lane embankment expressway would ease cargo handling through road and increase connectivity with rest of the country.
- The project would link Gwadar Port with the Makran Coastal Highway and improve logistic transportation of import and export.

<sup>50</sup> <https://fp.brecorder.com/2017/05/20170516179175/>

<sup>51</sup>

<https://defence.pk/pdf/threads/us-1-4-billion-development-projects-including-gwadar-airport-and-6-lane-gwadar-highway.495052/>

<sup>52</sup> <https://www.dawn.com/news/1359899>

<sup>53</sup> <https://timesofislamabad.com/19-Mar-2018/gwadar-port-expansion-plan-2018-19-unveiled>

<sup>54</sup> <https://www.app.com.pk/gwadar-to-emerge-on-world-map-as-major-trade-hub-pm/>

<sup>55</sup> <https://www.app.com.pk/gwadar-to-emerge-on-world-map-as-major-trade-hub-pm/>

- Make travel between major cities convenient and help Gawadar emerge as a consolidated shipping port.
- Ought to see a rise in FDI coming into the country
- Linking Gwadar Port with the main artery of national highway network and smooth logistic transportation of import, export and transit goods. <sup>56</sup>

## Karot Hydropower Station

Last Updated – 8<sup>th</sup> October 2018

### Key Details

<b>Primary Energy Input</b>	Hydel
<b>Technology</b>	Hydel
<b>Installed Capacity (MW)</b>	720
<b>Tariff</b>	
<b>Location</b>	River Jhelum
<b>Province</b>	AJK / Punjab
<b>Estimated Cost</b>	\$1698 million
<b>Executing Companies</b>	Karot Power Company Ltd. (KPCL) / CSAIL/ CTGI /CTG (China Three Gorges)
<b>Sponsors</b>	
<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Private Power and Infrastructure Board
<b>Status</b>	Expected to be completed by December 2021

Source: <http://cpec.gov.pk/project-details/16>

### Chronology

- **November 1984** – the Water and Power Development Authority identified Karot among several potential hydropower generation sites. The ranking studies were carried out by Wapda’s Hydro Electric Power Organization for KPK (then known as NWFP) and German consultancy firm GTZ.
- **2006** – The site started to be investigated for development at a capacity of 240 MW<sup>57</sup>

<sup>56</sup> <https://eproperty.pk/eastbay-expressway-gwadar-development-update/>

- **2007** – The site was offered as an Investment Power Project by the Private Power Infrastructure Board.
- **13<sup>th</sup> October 2009** – PPIB approved the bankable feasibility report
- **2010** – Environmental Protection Agency of Punjab approved the environmental impact assessment of the project
- **2011** – The environmental impact assessment of the project was approved by Environmental Protection Agency – Azad Jammu and Kashmir
- **May 2012** – TGSAIL started conducting the additional site investigations and exploration
- **29<sup>th</sup> May 2012** – NEPRA determined the feasibility stage tariff
- **11<sup>th</sup> December 2012** – NEPRA notified the revised feasibility stage tariff determination
- **February 2013** – TGSAIL finished the site work on diversion system. It was concluded that the technical scheme suggested by SMEC in the original feasibility study is technically unfeasible.
- **March 2013** – TGAIL started reviewing and updating the feasibility study according to the Chinese Standards and Codes.
- **July 2013** – The project company submitted the performance guarantee
- **29<sup>th</sup> August 2013** – PPIB issued the Letter of Support
- **26<sup>th</sup> November 2013** – NEPRA issued the Generation License
- **March 2014** – Feasibility report was prepared<sup>58</sup>
- **January 2015** – Pakistan Engineering Services updated the 2009 Environmental Protection Agency following changes in the project design.
- **25<sup>th</sup> February 2015** - KPCL and TGDC signed EPC contract.
- **2<sup>nd</sup> March 2015** – The Environmental Protection Agency-Punjab approved the updated environmental impact assessment of the project.<sup>59</sup>
- **10<sup>th</sup> January 2016** – The structural construction of the project begins
- **30<sup>th</sup> August 2016** – Karot Power Company (Pvt) LTD and Central power Purchasing Agency (Guarantee) Limited, Pakistan signed power purchase agreement
- **28<sup>th</sup> September 2016** – The land lease agreement has been signed on behalf of AJK government by the Private Power Cell and Chief Executive of Karot Power Company (Pvt.) Limited.
- **1<sup>st</sup> December 2016** – Karot Hydropower project issued “Notice to Proceed” to TGDC<sup>60</sup>

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57

<https://www.renewableenergyworld.com/articles/2015/04/karot-in-pakistan-to-be-first-hydropower-project-financed-by-chinas-silk-road-fund.html>

<sup>58</sup> <https://www.dawn.com/news/1166801>

<sup>59</sup> <https://www.power-technology.com/projects/karot-hydropower-project-jhelum-river/>

<sup>60</sup> <http://karotpower.com/Projects/Project-Progress>

- **22<sup>nd</sup> February 2017** – Financial closure was achieved
- **4 May 2018** - Prime Minister Shahid Khaqan Abbasi visited the project site.<sup>61</sup>
- **22<sup>nd</sup> September 2018** – River Closure has been completed.
- **25<sup>th</sup> September 2018** – The construction of the project officially started<sup>62</sup>
- **December 2021** – Expected Commercial Operation Date

### Expected Benefits

- 3,500 employment opportunities will be offered during the construction period.
- The project will have a reservoir storage capacity of 164.5m m3
- The project will generate power that will cater approximately seven million households.
- It is expected to reduce carbon dioxide emissions by 3.5 million tons per year.
- During the construction period, will accumulatively bring tax revenues of 23 million US dollars (about 2.4 billion rupees).
- It is expected that investment of the construction period will boost Pakistan's GDP by about 154million US dollars.

## CPHGC 1,320MW Coal-fired Power Plant, Hub, Balochistan

Last Updated – 14<sup>th</sup> November, 2018

### Key Details

<b>Primary Energy Input</b>	Coal (Imported)
<b>Technology</b>	Super Critical
<b>Installed Capacity (MW)</b>	1320
<b>Tariff</b>	
<b>Location</b>	Hub
<b>Province</b>	Balochistan
<b>Estimated Cost (US \$ Million)</b>	1995
<b>Executing Companies</b>	China Power Hub Generation Company (Private) Limited
<b>Sponsors</b>	China Power International Holding Ltd.  The Hub Power Company Limited

<sup>61</sup> <https://www.thenews.com.pk/print/313006-pm-visits-720mw-karot-hydropower-project>

<sup>62</sup>

<https://www.brecorder.com/2018/09/25/441779/construction-work-begins-on-cepcs-karot-hydropower-project/>



<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Private Power and Infrastructure Board
<b>Expected Completion Date</b>	1 <sup>st</sup> phase (660 MW) – February 2019 (Due to delay of power back-feeding and instability of national grid ) 2 <sup>nd</sup> phase (660 MW) – August 2019

## Chronology

- November 2014 – The PPIB approved processing of the project
- 19 January 2015 – The Hub Power company announced that it will set up the power plants<sup>63</sup>
- June 2015 - PPIB issued a LoI to the joint venture between Hubco and China Power International Holding Company.<sup>64</sup>
- 25 January 2017 – IA / Power Purchase Agreement signed
- 12 February 2016 – NEPRA has granted the upfront tariff to China Power Hub Generation Company for the power plants.
- 12 April 2016 – Issuance of LOS
- August 2016 – Construction of the project started<sup>65</sup>
- 24 January 2017 – 1st extension to LOS issued
- 21 March 2017 – Ground breaking ceremony conducted<sup>66</sup>
- 24 October 2017 – CPHGC Coal Power Plant signed a loan contract raising \$1.5 billion dollars from a consortium of banks led by China Development Bank.
- 24 October 2017 - China Power Hub Generation Company Pvt Ltd finalized \$1.5 billion financing arrangements with a consortium of Chinese banks.
- 18 September 2018 - The power plant is interconnected with the national grid, subsequently achieving back energization of its 500KV Gas Insulated Switchgear from Jamshoro side of the transmission lines.

## Benefits

<sup>63</sup> <https://www.dawn.com/news/1158111/hubco-to-set-up-1320mw-coal-based-power-plants>

<sup>64</sup>

<https://www.dawn.com/news/1294281/govt-gives-up-over-1000mw-of-imported-coal-fired-power-projects>

<sup>65</sup> <https://tribune.com.pk/story/1541357/2-chinese-approve-1-5-billion-financing-hubcos-project/>

<sup>66</sup> <http://cpec.gov.pk/project-details/6>

- The project has created 2,500 jobs for local population.

### Expected Benefits

- The National Grid will annually receive nine billion Kwh of electricity through the project.
- The project will support four million Pakistani households through its annual power consumption.
- The project provides employment opportunities to skilled, semi-skilled and un-skilled workforce during the construction phase.
- As part of Corporate Social Responsibility, various programs such as new schools, basic infrastructure site and technical training programs are under development.
- The project will meet the electricity demand of four million Pakistani households.

## Gwadar Port Operation and Development of Free Zone

<b>Project</b>	Gwadar Port Operation and Development of Free Zone
<b>Location</b>	Gwadar district, Balochistan
<b>Province</b>	Balochistan
<b>Estimated Cost (US \$ Million)</b>	250
<b>Contractors</b>	<b>Chinese Overseas Ports Holding Company Ltd</b>
<b>Financing</b>	investment

### Chronology

**May 24th, 2013 Premier Li Keqiang met with Pakistan Prime Minister Nawaz Sharif. China and Pakistan jointly decided to build the CPEC, which will connect Kashi (Kashgar) and Gwadar Port**

**April 20-21st, 2015 President Xi Jinping paid a successful visit to Pakistan and opened the construction of CPEC. He proposed to form a '1+4' cooperation mode with the CPEC.**

**April 21st, 2015** Chinese Overseas Ports Holding Company Ltd (COPHC) and the Pakistan government signed the Land Lease Agreement of Gwadar Port Free Zone.

**May 8th, 2015** The draft of Gwadar Free Zone Concept Plan was completed.

**May 11th, 2015** The cargo ship 'Zijing Song' of COSCO Group was docked at Gwadar Port, which initiated the first berthing commercial ships at Gwadar Port after COPHC took over operation rights.

**July 1st, 2015** The three school buses donated by COPHC were handed over to local schools in Gwadar.

**Oct.,2015** COPHC established the "COPHC Scholarship" in Gwadar.

**Nov. 11th, 2015** The first batch of land in Gwadar Free Zone was handed over after the signing ceremony was held at Pearl-Continental Hotel Gwadar.

**Nov. 11th, 2015** The China-Pakistan Gwadar Faqeer Primary School, which was jointly established by COPHC and China Foundation for Peace and Development, was launched. The commencement ceremony was held at the primary school site.

**Nov. 16th, 2015** COPHC and Dalian Ocean Fishery Group Corporation of Liaoning Province signed a strategic cooperation agreement.

**May 7th, 2016** The commencement ceremony for the Linyi Shopping Mall project in Pakistan (Gwadar) was held in the Gwadar Free Zone.

**May 10th, 2016** During the visit to Gwadar Port and local hospitals, the delegation of Red Cross Society of China said that China will provide support and assistance in health and medical care in Gwadar.

**Aug. 25th, 2016** Gwadar Free Zone Investment Guide is released

**Aug. 25th, 2016** COPHC and Pakistan National Logistics Cell signed a strategic cooperation agreement.

**Aug.29th, 2016** The CPEC Summit and Results Exhibition hosted by Ministry of Planning and Development of Pakistan was held in Islamabad. Prime Minister Sharif, Minister for Planning, Development & Reform and other Pakistani politicians went to the booth of COPHC to inquire about the progress of the project. Satisfied with the progress of the development of Gwadar Port and the Free Zone, they all extended their encouragement.

**Sept.1st, 2016** Prime Minister Sharif attended the commencement ceremony for the infrastructure project in the pilot area of Gwadar Free Zone held in Gwadar.

**Sept. 1st, 2016** With the tripartite agreement has signed in Gwadar, the second batch of land in Gwadar Free Zone was handed over. So far, 90% of land in this zone has been handed over.

**Sept. 1st, 2016** Prime Minister Sharif grants business licenses to the first 3 enterprises located in Gwadar Free Zone.

**Sept. 1st, 2016** Gwadar Faquer Primary School, funded by COPHC and China Foundation for Peace and Development, was handed over to Pakistan. The Tripartite Agreement was signed in Gwadar.

**Sept. 1st, 2016** The primary school has been put into use after its handover. The school management committee is composed of COPHC, Gwadar Port Authority, Gwadar Development Bureau and Gwadar Municipal Government, with President of COPHC as its Chairman and Honorary President.

**Sept. 25th, 2016** "Tianfu" freighter of CHINA COSCO SHIPPING GROUP berthed in Gwadar Port. The first batch of construction goods for free port project arrived at the port.

**Oct.25th, 2016** "Hanhai" freighter of CHINA COSCO SHIPPING GROUP berthed in Gwadar Port. The second batch of construction goods for free port project arrived at the port.

**Nov.13th, 2016** The arrival of China-Pakistan United Motorsports from Kashgar, Xinjiang to Gwadar marks the successful connection of CPEC. COPHC completed the loading and unloading of the first container liner unprecedentedly, symbolizing the Port's acquiring of capacity in loading and unloading of container ships.

**Mar. 26th, 2017** The construction goods applied to the China-Pakistan Boai Medical Emergency Center, which is funded by CRCF and COPHC, arrived at Gwadar Port. COPHC will provide assistance for its construction and build supporting facilities gratuitously. The center is scheduled to be completed and put into use in early May.

**Mar. 27th, 2017** Permanent Committee of the Shipping Department of Pakistan Port expressed satisfaction with the construction of Gwadar Port and Free Zone after visiting Gwadar Port.

**Mar. 30th, 2017** With EFU General Insurance Ltd in Pakistan listed for business in the Free Zone, two banks and an insurance company have settled in the free zone to provide relevant services which signals the gradual improvement of supporting facilities of the zone.

**April 13th , 2017** The investment agreement signed between the companies in Free Zone and Hangzhou Lichi Steel Tube Plant symbolizes that the land of pilot zone in Gwadar has been transferred and the investment work of starting zone has been completed.

**April 26th , 2017** COPHC and China Development Bank signed a Memorandum of Understanding on Supporting the Construction of Gwadar Port and Free Zone in Pakistan in Beijing, covering credits for development loans in Gwadar as high as 10 billion yuan.

**May 7th , 2017** On May 7th, 2017, the “China-Pakistan Boai Medical Emergency Center” , jointly established by the Chinese Red Cross Foundation (CRCF) and China Overseas Port Holding Co., Ltd. (COPHC), was built in Gwadar.

Zhang Baozhong, chairman of the board of China Overseas Port Holding Co., Ltd., one of the major sponsors of the emergency center, spoke at the inauguration ceremony, and Chen Zhu, chairman of a committee, issued the "Honoring Card" in person.

**Sept. 6th, 2017** The two new quay cranes purchased by COPHC from Shanghai Zhenhua Heavy Industries Co., Ltd arrived at Gwadar Port. The arrival of new equipment will considerably increase the capacity of terminals to handle containers.

**Sept. 22nd, 2017** The first Chinese medical teams arrived at Gwadar Port, Pakistan to provide medical services to Chinese companies and local people.

**Nov. 22nd, 2017** Assisted by the Chinese government, the Gwadar East Bay Expressway Project, was officially started.

Shahid Khaqan Abbasi, Prime Minister of Pakistan, led senior cabinet officials to attend the Commencement ceremony and personally laid the foundation stone for the project.

**Nov. 22nd, 2017** During the inspection at Gwadar Port, Ambassador Yao cordially met with the headmaster of Faquer Primary School in Gwadar, and the student representatives. On behalf of the Chinese Embassy in Pakistan, he donated 6.8 million rupees as student grants, which would be used under the supervision of the Embassy and COPHC.

**Jan. 1st, 2018** The desalination plant for Gwadar Free Zone were completed and put into operation, starting supplying water to the Gwadar citizens.

**Jan. 29th, 2018** The opening ceremony of the Gwadar Free Zone and the first Gwadar International EXPO were successfully held. Pakistani Prime Minister

Abbasi and many other officials and Ambassador Yao were present. As the first large-scale international exhibition in the history of Gwadar, this fair clearly shows that the governments of China and Pakistan have attached great importance to it. The fair also demonstrates the fruitful results achieved with good public participation.

Feb. 2nd, 2018 China Overseas Port Holding Co., Ltd. was awarded the “Outstanding Contribution Award” and “Best Corporate Image Award” by the Karachi Branch of the Association of Chinese Enterprises in Pakistan.

Wang Yu, Consul General of the Chinese embassy in Karachi, granted the company with medals and certificates of honor.

Mar. 7th, 2018 “Pakistan Gwadar Middle Gulf Express” operated by COSCO Shipping was officially opened in Gwadar Port, which made Jebel Ali, Karachi, Qasim and Abu Dhabi the transshipment ports, counting on the 16 international airlines of COSCO Shipping to provide cross-national services for global customers who exited and entered Gwadar Port. With Gwadar Port connected to almost all the major ports around the world, it marks that Gwadar Port has taken a major step towards its development and started a new chapter in international development.

May 1st, 2018 Liu Xuanguo, Vice-Chairman of the Red Cross Foundation of China, led the second batch of Red Cross foreign aid medical teams to Gwadar. After helping with the handover of the first and second batches of medical teams, COPHC discussed the follow-up work of the second team.

May 6th, 2018 COPHC signed a cooperation agreement with the provincial government of Balochistan for a daily supply of 300,000 gallons of desalinated water.

June 25th, 2018 COPHC sent off the students attending the class in China.

July 18th, 2018 Chief Minister of Balochistan, Alauddin Marri, leading a delegation to inspect Gwadar Port and the Gwadar Free Zone, witnessed the letter-exchange ceremony for a daily supply of 1.5 million gallons of freshwater between Ministry of Public Health and Environment of Balochistan and COPHC.

Sept. 28th, 2018 The first “Gwadar Marble & Minerals Expo and Mineral Development Seminar” was successfully held in Gwadar.

Chief Minister of Balochistan, Kamal Khan, along with many other political figures, took a special trip to Gwadar. More than 500 participants from more than 100 companies and Chambers of Commerce in China and Pakistan were present. The turnover of exhibition and intention agreement exceeded RMB 100 million.

Oct. 29th, 2018 Parliament leaders from 26 countries including Pakistan Chairman of Senate Sadiq Sanjrani attended the “ Asian Parliamentary Assembly” , the first large-scale international conference successfully held in Gwadar.

## Suki Kinari Hydropower Station

Last Updated – 7<sup>th</sup> August 2018

### Key Details

<b>Primary Energy Input</b>	Hydel
<b>Technology</b>	Hydel
<b>Installed Capacity (MW)</b>	870
<b>Location</b>	River Kunhar (a tributary of River Jhelum)
<b>Province</b>	District Mansehra, KPK
<b>Estimated Cost</b>	\$1,802 million
<b>Executing Company</b>	Suki Kinari Hydro (Pvt) Ltd / China Gezhouba Group Company Ltd
<b>Sponsors</b>	
<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Private Power and Infrastructure Board
<b>Status</b>	70 percent work completed <sup>67</sup>
<b>Expected Date of Completion</b>	June 2020/2021/December 2022

Source: <http://cpec.gov.pk/project-details/15>

### Chronology

- 11 April 2014 – Private Power and Infrastructure Board and S K Hydro Private Limited signed Implementation Agreement for development of power project.
- 24 August 2016 – An agreement of power project was signed between KPK government, SK Hydro Pvt Limited and Industrial & Commercial Bank of China Limited.
- 17 November 2016 – Land acquisition award was announced
- 31 December 2016 – The project achieved its financial close.<sup>68</sup>

<sup>67</sup> <http://www.invest.gov.pk/ViewNews.aspx?NID=2645>

- 9 January 2017 – The power project achieved its financial close with the efforts and facilitation of the Private Power and Infrastructure Board.

### **Expected Benefits**

- It is the largest hydro independent power producer in Pakistan.
- By 2022, the project is expected to generate 3,081 GWh million units per year.
- The project is expected to increase existing power generation capacity by more than five percent.
- The KPK government will earn approximately Rs. 1.5 billion per year for water use in the form of royalty.<sup>69</sup>
- Through the project, KPK will receive additional 113 MW electricity in its share.<sup>70</sup>
- After thirty years of operation, the project will be transferred to KPK government free of cost.<sup>71</sup>
- The project poses minimal environmental and social impacts because it is a run of the river project.
- It is considered as one of the most cost effective hydropower schemes in the region due to its high design head of 900 metres and relatively short intake structure crest.<sup>72</sup>
- The Kunhar river originates and traverses through the whole length in Pakistani territory, which ensures 100 percent uninterrupted flow through project life.
- Located on an early rising stream, maximum power will be offered by the power project in May and June; the time period when energy requirements are acute.
- No significant resettlement issues are envisaged since the project structures are located at places with sparse population.
- The project will be able to generate maximum power for up to four hours daily.
- When completed, the project will save significant fuel cost. In other words, foreign exchange will be saved due to reduction in the import of furnace oil.<sup>73</sup>

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<http://www.app.com.pk/870-mw-suki-kinari-hydropower-project-to-be-completed-by-dec-2022-senate-tolds/>

69

<http://www.cpecinfo.com/news/suki-kinari-hydropower-project-of-870mw-achieves-financial-close/OTQ2>

<sup>70</sup> <https://pakobserver.net/agreement-of-870mw-suki-kinari-hydropower-project-signed/>

<sup>71</sup> <https://nation.com.pk/12-Apr-2014/deal-signed-for-870mw-hydropower-project>

<sup>72</sup> <https://www.pcq.com.pk/suki-kinari-hydropower-project-pakistan/>

<sup>73</sup> <https://www.pcq.com.pk/suki-kinari-hydropower-project-pakistan/>



# Thar Coal Fired Power Plant

Last Updated – 16<sup>th</sup> August 2018

## Key Details

<b>Primary Energy Input</b>	<b>Coal (Local)</b>
<b>Technology</b>	Sub Critical
<b>Installed Capacity (MW)</b>	660
<b>Location</b>	Thar-Block-II
<b>Province</b>	Sindh
<b>Estimated Cost</b>	\$2,000 million <ul style="list-style-type: none"> <li>• \$1.1 billion for power project</li> <li>• \$845 million financing for mining<sup>74</sup></li> <li>• \$2.5 billion for complementary works in the area. (which increases the project cost to \$4.5 billion)<sup>75</sup></li> </ul>
<b>Executing Company</b>	Engro Power Gen Thar Ltd. / China Machinery Engineering Corporation
<b>Sponsors</b>	<ul style="list-style-type: none"> <li>• Engro Powergen Limited</li> <li>• Thal Limited</li> <li>• Hub Power Company</li> <li>• Habib Bank Limited</li> <li>• China's Machinery Engineering Corporation<sup>76</sup></li> </ul>
<b>Financing</b>	Independent Power Producer
<b>Contractors</b>	China's Machinery Engineering Corporation
<b>Coordinating Ministry</b>	Ministry of Water and Power
<b>Supervising Agency</b>	Private Power and Infrastructure Board
<b>Status</b>	70 percent work on both mining and power projects have been completed
<b>Expected Date of Completion</b>	December 2018 / June 2019

Source: <http://cpec.gov.pk/project-details/3>

## Chronology

<sup>74</sup>

<https://profit.pakistantoday.com.pk/2017/12/30/660-megawatt-thar-coal-fired-power-plant-to-be-operational-by-dec-2018/>

<sup>75</sup> <https://www.dawn.com/news/1387151>

<sup>76</sup>

<https://www.forbes.com/sites/kenrapoza/2016/02/19/china-shutters-coal-mines-at-home-opens-2-billion-mining-project-in-pakistan/#4a45b52018db>

- 4 April 2016 – The financial close of the project was achieved.
- April 2016 – Ground breaking ceremony<sup>77</sup>
- 30 January 2015 - The National Electric Power Regulatory Authority (NEPRA) has approved upfront tariffs for the power plants.<sup>78</sup>
- 17 August 2015 - HBL, UBL and Bank Alfalah signed an agreement to lend \$500 million (Rs. 50 billion) to Sindh Engro Coal Mining Company to finance Pakistan's first open-pit coal mine in Tharparkar district.<sup>79</sup>
- September 2017 – 50 percent work of coal mining completed.
- 31 October 2017 – The Private Power and Infrastructure Board has agreed to sign implementation agreements with sponsors of Thar power plants.<sup>80</sup>

### **Expected Benefits**

- Hundreds of thousands of indigenous trees will be planted to maintain the natural ecosystem of the desert.
- In the project design, wind and water erosion control measures will be incorporated, inclusive of dune management.
- An alternative water supply source for domestic use will be provided to those affected by the project if and when needed.
- The underground water will not be contaminated, disturbed or pumped into the sea.
- In case any contamination occurs, nearby communities will be provided RO plants to ensure access to quality clean water.
- The mining operations will cause minimal and manageable wind pollution. Dust management measures will be taken to further minimize the adverse environmental impact.
- The two villages which are planned to be relocated will be provided with separate Gaucher (pastoral) land measuring between 850 to 1200 acres. The land will also be equipped with advanced level veterinary facilities.
- 3000 unskilled and nearly 1400 skilled workers will be employed.<sup>81</sup>

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<https://profit.pakistantoday.com.pk/2017/12/30/660-megawatt-thar-coal-fired-power-plant-to-be-operational-by-dec-2018/>

78

<https://www.thenews.com.pk/print/21139-govt-approves-upfront-tariffs-for-thar-coal-fired-power-projects>

79

<https://tribune.com.pk/story/939838/solving-energy-crisis-landmark-deal-seals-finance-of-thar-coal-mine/>

<sup>80</sup> <https://tribune.com.pk/story/1546428/2-work-thar-coal-power-projects-start-early/>

<sup>81</sup> <http://fp.brecorder.com/2016/02/2016022720414/>

- The block possess exploitable lignite reserves of 1.57 billion tonnes, which has the potential to generate five gigawatts power for 50 years.
- Prospects of electricity exports to India.<sup>82</sup>
- 3 percent shares of Thar Coal Block-2 will be provided to displaced locals from 54 percent shareholding of the Sindh government in Sindh Engro Mining Company, Thar Coal Block-2.
- Sindh government would run a complete programme for rehabilitation and welfare of the people of Thar coal mining area.<sup>83</sup>

## **Gwadar Smart Port City Master Plan**

<b>Project</b>	Gwadar Smart Port City Master Plan
<b>Location</b>	Gwadar district, Balochistan
<b>Province</b>	Balochistan
<b>Estimated Cost (US \$ Million)</b>	4
<b>Contractors</b>	Chinese Fourth Harbour Design Institute
<b>Financing</b>	Grant from Chinese Government

### **Chronology**

**Nov 2015 - MoU signed**

**August 2015 - LOE signed**

**May 2017 - Contract Signed**

## **Pilot Project of Digital Terrestrial Multimedia Broadcast**

**Last Updated – 5<sup>th</sup> October 2018**

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<sup>82</sup> <https://www.dawn.com/news/1387151>

<sup>83</sup>

<https://www.technologytimes.pk/sindh-cm-announced-power-generation-from-thar-coal-by-2019/>

### Key Details

Province	Islamabad
Estimated Cost (US \$ Million)	23
Status	Under construction
Financing	Grant from Chinese government

### Chronology

2<sup>nd</sup> May 2018 - PC-1 of the Demonstration project was approved by CDWP

### Benefits

- The project will serve as a major upgradation from terrestrial TV broadcasting in the country.
- The project will likely have great impact on Pakistani media industry, changing revenue models and programming.<sup>84</sup>

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<sup>84</sup> [https://epaper.dawn.com/DetailImage.php?StoryImage=01\\_10\\_2017\\_003\\_004](https://epaper.dawn.com/DetailImage.php?StoryImage=01_10_2017_003_004)