**Vision**
Maintain excellence in delivering prompt and expert services to the investors of existing & upcoming power generation and related infrastructure projects

**Mission Statement**
To provide one-window facility to investors; promote, encourage and facilitate investments in the power sector under the applicable power policies and to safeguard the investments already made therein

**Core Values**
Highest quality of services
Professionalism
Integrity
Team Work
Table of Contents

FOREWORD BY MANAGING DIRECTOR

1. THE BOARD OF PPIB
2. KEY HIGHLIGHTS OF THE YEAR
3. PRIVATE POWER AND INFRASTRUCTURE BOARD’s PROFILE
   3.1 Private Power and Infrastructure Board’s Profile
   3.2 Organogram
   3.3 Board of Directors
   3.4 Committees of the Board
   3.5 Management Team
   3.6 PPIB Office
   3.7 Main Bankers
   3.8 Auditors
4. PAKISTAN’S POWER SECTOR AND PPIB’s ROLE
5. MEETINGS OF THE BOARD
6. IMPLEMENTATION OF HYDROPOWER IPPs
7. IMPLEMENTATION OF IPPs BASED ON THAR COAL
8. IMPLEMENTATION OF IPPs BASED ON IMPORTED COAL AND RLNG
9. DEVELOPMENT OF TRANSMISSION NETWORK
10. IMPLEMENTATION OF CPEC ENERGY CHAPTER
11. FUTURE PLANS AND TARGETS
12. CORPORATE BRILLIANCE
13. PICTORIAL VIEW OF IMPORTANT EVENTS
14. AUDITED STATEMENT OF INCOME AND EXPENDITURE, BALANCE SHEET OF PPIB FOR THE YEAR 2019-20

APPENDICES
Acronyms

ADB Asian Development Bank
AEDB Alternative Energy Development Board
CPEC China-Pakistan Economic Corridor
CPPA-G Central Power Purchasing Agency (Guarantee) Ltd.
CTBCM Competitive Trading Bilateral Contract Market
COD Commercial Operation Date
CCoE Cabinet Committee on Energy
CCPP Combined Cycle Power Project
DISCOs Distribution Companies
EOI Expression of Interest
EPA Energy Purchase Agreement
EPC Engineering Procurement & Construction
ECC Economic Coordination Committee
FS Feasibility Study
FSA Fuel Supply Agreement
FC Financial Close
FBR Federal Board of Revenue
GoAJ&K Government of Azad Jammu & Kashmir
GoP Government of Pakistan
GoPb Government of Punjab
GoKP Government of Khyber Pakhtunkhwa
GoB Government of Balochistan
GoS Government of Sindh
GENCOs Generation Companies
GSA Gas Supply Agreement
GWh Giga Watt Hour
HSFO High Sulphur Furnace Oil
HPP Hydropower Project
IA Implementation Agreement
IAA Independent Auction Administrator
IPPs Independent Power Producers
ICB International Competitive Bidding
ICCEP Indicative Generation Capacity Expansion Plan
JCC Joint Cooperation Committee
KE K-Electric Limited

KESC Karachi Electric Supply Corporation
LA Lease Agreement
LOI Letter of Interest/Letter of Intent
LOS Letter of Support
MoE Ministry of Energy
MoF Ministry of Finance
MoP&NR Ministry of Petroleum & Natural Resources
MW Megawatt
MOU Memorandum of Understanding
NEPRA National Electric Power Regulatory Authority
NPCC National Power Control Center
NTDC National Transmission and Despatch Company
O&M Operation & Maintenance
OGDCL Oil and Gas Development Company Limited
PPDB Punjab Power Development Board
PPIB Private Power and Infrastructure Board
PEDO Pakhtunkhwa Energy Development Organization
PEPCO Pakistan Electric Power Company
PPA Power Purchase Agreement
PG Performance Guarantee
PMDU Prime Minister’s Performance Delivery Unit
PPP Public Private Partnership
RLNG Regasified Liquefied Natural Gas
SA Shareholders Agreement
SNGPL Sui Northern Gas Pipelines Limited
SHPP Small Hydropower Plant
TA Tripartite Agreement
TLOS Tripartite Letter of Support
TCEB Thar Coal and Energy Board
TOR Terms of Reference
WAPDA Water and Power Development Authority
WUL Water Use License
WUA Water Use Agreement
Foreword

It gives me great pleasure to present the Annual Report of the Private Power and Infrastructure Board (PPiB) for the year June 30, 2020 in the light of provision of Part-V, section 21 of PPiB Act, 2012.

PPiB has been working to attract and facilitate foreign direct investment (FDI) in Pakistan’s power sector and related infrastructure since its inception in September 1994. PPiB also provided technical and legal support to the provinces, AJ&K and Gilgit Baltistan, and monitored and assisted independent Power Producers (IPP).

PPiB has been putting all its efforts and resources for induction of sustainable and affordable power generation in the national grid to overcome the electricity crisis. Due to persistent efforts and hardwork, the loadshedding in the country has been reduced significantly. With the addition of less expensive imported fuels like coal and RLNG together with indigenous coal and hydro, the country will soon start receiving affordable electricity which will not only provide relief to the consumers but will also curb the circular debt issue. In upcoming years increased attention will be given to hydel, wind and solar energy sources. PPiB is committed to achieve target of materializing additional 3310 MW by end 2021.

In line with the Government Policies, PPiB is working to significantly improve fuel mix by keeping the balance between imported and indigenous fuels for upcoming power projects under its current portfolio. Under process IPPs, which are based on hydro and Thar coal with mammoth 87% combined contribution, when commissioned will contribute in minimizing the role of imported fuel and improving the presence of hydro and Thar coal based power in the overall energy mix of the country as well as the energy mix achieved by PPiB.

The role of China-Pakistan Economic Corridor (CPEC) in developing Pakistan’s power sector cannot be ignored, without which dream of overcoming electricity challenge would not have been realized. Being one-window facilitator and handling major energy projects under the CPEC, PPiB’s role was pivotal. CPEC has turned to be a real game changer in the field of energy and today, thousands of affordable and less expensive megawatts are being nurtured under CPEC which will bring revolution in this sector. Under the CPEC, overall thirteen IPPs of 11,648 MW will be commissioned out of which four projects of 4260 MW have already been commissioned, whereas nine projects of 7,028 MW are under process. Similarly, Pakistan’s first private sector Transmission line Project is also being implemented under CPEC, which would be a much needed addition as the current transmission line network is not fully capable of transmitting thousands of new megawatts. PPiB is developing a framework and security package for award of more such projects to private sector through International Competitive Bidding (ICB).

The Annual Report of Private Power and Infrastructure Board for the year 2019-20 relates to the contributions made by PPiB to trigger the economy by adding sufficient megawatts to the national grid through private sector mobilization. PPiB has so far added 17,551 MW of electricity in the system with a cumulative investment of US$ 20 billion and endeavoring to pursue more investment in the coming years. In addition to commissioned IPPs, PPiB is processing twenty two (22) power generation projects of more than 12,000 MW while approximately 900 km Matiari-Lahore Transmission Line project which is not only the first private sector transmission line project but it is the first project which is equipped with HVDC technology is also being processed efficiently.

The Annual Report 2019-20 covers an overview of PPiB achievements and activities for the year under consideration. I hope that the annual Report 2019-20 will prove to be a good information source for researchers, academia and for the general public interested in the power sector of Pakistan.

Shah Jahan Mirza
Managing Director
The Board of PPIB (2019-20)

OMAR AYUB KHAN
Federal Minister for Energy

Members

IRFAN ALI
Secretary, Ministry of Energy
(Power Division)

SHAH JAHAN MIRZA
Managing Director PPIB

NAVEED KAMRAN BALOCH
Secretary, Ministry of Finance

ZAFAR HASAN
Secretary Planning Division

MIAN ASAD HAYAUD DIN
Secretary, Ministry of Energy
(Petroleum Division)

SYED M. SHABBAR ZAIDI
Chairman, FBR

LT. GEN (R) MUZAMMIL HUSSAIN
Chairman, WAPDA

AZAM SULEMAN KHAN
Chief Secretary (Punjab)
Members

MUMTAZ ALI SHAH
Chief Secretary (Sindh)

DR. KARIM NIAZ
Chief Secretary (KP)

MATHAR NIAZ RANA
Chief Secretary (AJ&K)

SHERYAR TAJ
Secretary (Energy) - Balochistan

FATA Merged in KP

SECRETARY AI&C - FATA
Key Highlights of the Year
Key Highlights of the Year

As one-window facilitator on behalf of the Government of Pakistan, PPIB is responsible to promote, encourage, facilitate and safeguard private investment in power sector as mandated through “Private Power and Infrastructure Board Act, 2012”.

The Financial Year 2019-20 was a challenging year for PPIB in terms of continuing office operations and providing round the clock facilitation to IPPs during COVID-19 outbreak. Despite various hurdles and hardships created during the pandemic, PPIB handled the situation smartly and while adopting necessary precautionary measures as envisaged under Corona SOPs continued working smoothly. Online meetings were held with project sponsors whenever required, at PPIB premises after strictly adhering to the safety SOPs. Meetings to evaluate the performance and progress of IPPs was also a regular practice. By virtue of achieving critical milestones by various IPPs under PPIB's expert facilitation, the year 2019-20 brought many success stories for the power sector of Pakistan which will be discussed in forthcoming lines. The Pandemic jolted the economic and social activities world-wide including Pakistan. Due to same reasons, various projects' timelines were slightly affected, however, due to smart and proactive approach adopted by PPIB as well as active participation of projects' sponsors prevented the severity of the Pandemic.

Over the recent years, private investments in mega thermal projects (including Thar coal, imported coal and RLNG), Renewable Energy projects (Hydro, Wind and Solar) and HVDC transmission line have played decisive role in expansion and diversification of country's power sector. During the year, PPIB expedited portfolio of projects consisting of hydropower, Thar coal, imported coal and RLNG, and as a result, various IPPs were able to find headway towards accomplishment of critical milestones which broadly include issuance of LOS/TLOS, execution of project agreements, achievement of Financial Closures, tariff and land acquisition processes etc. Fuels wise detail of IPPs being processed by PPIB during 2019-20 is illustrated as follows:

<table>
<thead>
<tr>
<th></th>
<th>Hydropower</th>
<th>Thar coal</th>
<th>Imported Coal</th>
<th>RLNG</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>MW</td>
<td>No.</td>
<td>MW</td>
<td>No.</td>
</tr>
<tr>
<td>14110 MW</td>
<td></td>
<td>6277</td>
<td>07</td>
<td>4950</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>1620</td>
<td>01</td>
<td>1263</td>
</tr>
</tbody>
</table>

*Including Gulpur, Enro and CPHGC projects which achieved CODs during 2019-20

PPIB is committed to reshape the current fuel mix and to make it largely dominated by prioritized indigenous and renewable fuels. In this regard, PPIB has already started delivering success stories and has so far materialized three hydro and one Thar coal based IPP of 993 MW cumulative power generation capacity. Similarly, less expensive RLNG and imported coal based power plants are also under active processing, however, owing to government priorities and policies, such fuels are no more in the priority list of GoP/PPIB for achieving the ultimate goal of optimizing indigenous and renewable resources in country’s fuel mix basket.

2020 was a challenging year for PPIB as a number of IPPs were approaching towards advance to final stages, hence in such a critical stage, all such IPPs were required maximum facilitation from PPIB. As a result of PPIB’s relentless efforts, three IPPs, (1,320 MW imported coal based IPP at Hub, 660 MW Thar coal based IPP at Thar Block-II and 102 MW Gulpur Hydro IPP) successfully achieved Commercial Operation Date (COD) and are currently feeding electricity to the national grid. In addition to power generation projects, PPIB is handling a mega and state of the art Transmission Line Project which is not only the first private sector project of country but also the first project which is equipped with HVDC technology which is highly efficient technology in transmitting power at longer destinations. The project started construction activities in December 2018 and in a short period of time, inspite of the COVID-19 pandemic challenge, completed more than 85% of the construction work till June 2020. Highlights of major laurels achieved by PPIB during 2019-20 in terms of processing power generation and transmission line projects are described hereunder:

- Promoting indigenous coal and hydro resources for power generation
- Another 2 hydro IPPs of 1604 MW at advance stages of construction
- Another 2 Thar coal based IPPs are under construction after achieving Financial Close while several other IPPs started construction work before achieving Financial Close
- Pakistan’s first private sector Matiari-Lahore HVDC Transmission Line Project being facilitated by PPIB is at final stages of construction
- 3 IPPs of 2082 MW commissioned through PPIB during 2019-20
- Pakistan’s first Thar coal based IPP commissioned during 2019-20
- Overall 40 IPPs of 17,551 MW commissioned by PPIB which constitutes approx. 50% of total installed generation capacity of country.
- Playing lead role in implementing CPEC based power generation projects which include 13 projects of 11,648 MW and one Transmission Line project
- Affordable and sustainable Power additions by PPIB
Commissioning of Gulpur Hydropower Project

Gulpur is a run-of-the-river Hydropower Project which was declared as Commissioned Project by PPIB on 10th March 2020 and thereafter joined the league of commissioned hydropower IPPs under PPIB’s supervision and facilitation.

Commissioning of Thar Coal based Engro Power Gen

Pakistan’s first Thar coal based 660 MW Engro Powergen Thar Limited (EPTL) successfully achieved Commercial Operation Date on 10th July 2019 followed by synchronization of both of its units (330 MW each) in the months of March and April 2019 respectively.

Commissioning of Imported Coal based Power Project at Hub

Hub imported coal based power project is also an integral part of historic CPEC initiative. Hub Project was declared as commissioned IPP by PPIB on 17th August 2019.

Financial Close of Thar coal based Thar Energy Limited Project

PPIB declared Financial Close of 330 MW Thar Energy Limited, another CPEC project on 30th January 2020. However, in order to save time, construction work of the project was already started by Project Company prior to achievement of Financial Close.

Inauguration of imported coal based Gwadar Power Project

Gwadar Power Project is being processed by PPIB under CPEC umbrella and was inaugurated on 4th November 2019. A ceremony in this regard was held in Gwadar. Availability of 300 MW to Gwadar which features heavily in CPEC would be immensely beneficial for flourishing economic activities.

River Closure of Suki Kinari Hydropower Project

884 MW Suki Kinari project which is being processed by PPIB under CPEC is a largest private hydropower project in the KP province. The Project achieved river closure on 28th September 2019 and entered into a new phase of its dam construction.
In order to tap vast potential of hydropower generation in the country, PPIB announced issuance of Tripartite Letters of Support (TLOS) to Small Hydropower Projects. As a first step, PPIB issued TLOS to 7.08 MW Riali and 8 MW Kathai on 16 Oct, and 20 Nov 2019 respectively.

Power Sector has been working towards transition of existing market from single buyer model to a Competitive Wholesale Power Market. To make a competitive wholesale electricity market, a comprehensive plan which is “Competitive Trading Bilateral Contract Market” (CTBCM) is in the process of implementation. Pursuant to CTBCM detailed design, PPIB as an Independent Auction Administrator (IAA) will be responsible to provide support to DISCOs in procurement of new capacity on competitive terms through auctions as per provisions of the applicable procurement regulations. PPIB will also be responsible for Procurement Planning for DISCOs based on new capacity additions requirement for the system as worked out in the IGCEP. Further in case, DISCO is not credit worthy to provide the credit cover, the IAA will provide support in form of arranging guarantees and it will also provide security cover against financially weak DISCOs. Accordingly, pursuant to NEPRA’s CTBCM Determination dated 5th December 2019, PPIB has constituted a dedicated Market Implementation Group (MIG) of its professionals. PPIB’s MIG with full support of top management has been working on achieving the tasks assigned to PPIB under NEPRA’s CTBCM determination. The Group is working in close collaboration with CPPA-G team assuring full organizational support in implementation of approved Market Model and subsequently updated Road Map. PPIB is actively working on the assigned tasks including formulation of new draft policy framework, merger plan of AEDB into PPIB, preparation of application for IAA registration with NEPRA, HR & IT strengthening to perform its role as an IAA in future electricity market. As per NEPRA’s determination the target COD of CTBCM is 2nd quarter of 2022.

PPIB having leading role in arranging power generating capacity, actively contributed and provided comprehensive inputs on processes, methodology, assumptions, basis used to workout demand projection and selection criteria and time lines of projects being evaluated under Indicative Generation Capacity Expansion Plan (IGCEP). IGCEP has been prepared by National Transmission and Despatch Company (NTDC) as per the grid code requirements of NEPRA. During consultative process related to IGCEP, PPIB provided its full support in the form of relevant data provision related to its future power projects.

Pakistan’s power market is fully poised for long term and sustainable structural reforms based on the principles of competitiveness, transparency and sustainability. Under the CTBCM, it is being envisioned that the structural reforms will bring more confidence in the market and competition thus will bring the prices of electricity down to affordable level. This in turn will help to ease fiscal pressure on the Federal Government. The draft National Electricity Policy 2020 of the GoP, which is about to be launched in the near future, identifies inter-alia the major goals to be achieved for the Power sector and provides policy level directions. It also plays the key guiding principles to develop subservient frameworks that will steer the decision making in the electricity sector to achieve the identified goals. Accordingly, following such principles, PPIB is aiming to synchronize the existing power generation framework with National Electricity Policy 2020 with its overarching long-term goals comprising but not limited to i) affordability, ii) Energy Security and iii) Sustainability and to dovetail the generation.
Private Power and Infrastructure Board

The framework [i.e. Policy Framework for Power Generation 2021] keeping in view the investors’ friendly regime at one end and affordable electricity for masses at large through bringing-in market competition.

There are various important bipartite and tripartite activities involved in processing of a power generation project such as tariff determination, land acquisition, generation license, environmental clearance, IA, PPA, WUA, CSA, TSA, FSA etc which are interdependent on each other and if this cycle of activities is disrupted by any single activity, it impacts on the overall chain thus disturbing the project timelines. In view of the above, although PPIB achieved significant progress in advancing and implementing upcoming IPPs, however, some potential force majeures beyond the control of project companies/sponsors hampered the overall development pace of few projects. However, in all such cases, PPIB referred matters to the Board and extensions in achievement of various milestones which include issuance of LOI/LOS/FC or RCOD were solicited while remaining within the legal/policy framework and purely on the basis of merit. The projects which were delayed in accomplishing various critical tasks due to multiple reasons are outlined as follows:

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Brief description of delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>660 MW Thar coal based Engagement</td>
<td>The project was required to achieve COD by June 2019 however, COD was achieved on 10th July 2019 due to the process of extensive testing. Nevertheless, project had already started generating electricity from both units (each comprising 330 MW) in March and April 2019.</td>
</tr>
<tr>
<td>330 MW Thar coal based ThalNova Power Project</td>
<td>Project is behind the schedule and not likely to achieve COD in Mar-21. Delays attributed to factors including outbreak of COVID-19 pandemic. Other factors include Sinosure, macroeconomic situation, delays in coal availability.</td>
</tr>
<tr>
<td>330 MW Thar Coal based Thar Energy Limited Power Project</td>
<td>Project is behind the schedule and not likely to achieve COD in Mar-21. Delays attributed to factors including outbreak of COVID-19 pandemic. Other factors include Sinosure, macroeconomic situation, delays in coal availability.</td>
</tr>
<tr>
<td>1320 MW Thar coal based Shanghai Power Project</td>
<td>The project is facing issues with regards to water allocation and execution of Water Supply Agreement with Government of Sindh because of which extensions in achievement of FC have been granted by PPIB with the approval of PPIB Board. This delay may also impact on the overall progress of the project. COVID-19 factor may also cause disruption in project development as potential force majeure.</td>
</tr>
<tr>
<td>300 MW Imported Coal based Gwadar Power Project</td>
<td>Faced delays in issuance of LOS on part of tariff determination, land acquisition, signing of PPA and grid interconnection &amp; transmission infrastructure issues. However, after partial resolution of some of the issues, PPIB issued LOS to the Project on 23rd August 2019. Thereafter, project is again facing delays regarding execution of Quad-partite PPA. PPIB is coordinating with all the concerned stakeholders for early resolution of the issues enabling to issue PPA and IA which are pre-requisites for declaration of FC. In this regard, PPIB has twice extended FC date with the approval of Board. The outbreak of COVID-19 is also feared to further impact on the progress of project.</td>
</tr>
</tbody>
</table>

Note: Outbreak of COVID-19 is anticipated to impact the majority of ongoing IPPs, however, IPPs which are at advance stages of construction or about to start construction are more likely to be affected.
# Private Power and Infrastructure Board’s Profile

Government of Pakistan (GoP) in view of strategic unbundling plan of WAPDA approved in 1992 considering that power policy issue cuts across the responsibility of numerous ministries and departments and that specialized skill set in technical, financial, legal and investment areas lacks in typical government structure established the Private Power and Infrastructure Board (PPIB) in 1994 as a “One-Window” organization to promote, encourage and facilitate private investments in power sector. While initially PPIB was established through an administrative order of Federal Government, to engender more operational and administrative independence PPIB was given statutory status in 2012 through Private Power and Infrastructure Board Act, 2012 (Act VI of 2012) (the “PPIB Act”). The core functions of PPIB include implementation of and assist in formulation of power policies towards facilitation of development of power generation and infrastructure (transmission lines), preparation and execution of security package documents including GoP Guarantee in relation to such projects, coordination with provincial/ AJK/GB governments and other government agencies (such as NEPRA, SBP, FBR, Environmental Protection Agencies etc) to achieve the policy objectives. On power generation side, the PPIB’s mandate extends to all kind of power generation including hydel, thermal, coal, gas, RFO, diesel except nuclear, alternative and renewable resources. Later to allow specific public sector projects to be processed in IPP mode, PPIB Act was amended vide Private Power & Infrastructure Board Amendment Act, 2016. PPIB since its inception has been instrumental to attract massive investment in energy sector in different technologies including hydropower, coal, gas, RLNG and oil under various GoP power policies announced in 1994, 1995, 2002 and finally 2015. It has acquired in-house expertise and right mix of skill set in structuring project finance transactions, evaluation of financing documents, negotiating and finalizing project agreements, conduct of feasibility studies etc. It has played a vital and leading role in bridging the gap between demand and supply in power sector and so far has successfully facilitated development of forty (40) power projects based on multi-fuel technologies with cumulative capacity of 13,550 Megawatts (MW), approximately 50% of total generation capacity of Pakistan. PPIB has also facilitated development of Pakistan’s first ever private sector approx 870 KM long HVDC transmission line project under the aegis of CPEC. Thus a vast, enriching and time tested experience in the areas of engineering, policy, HR, IT and law is presently housed in PPIB. PPIB performs following functions in the light of PPIB Act 2012 and PPIB Amendment Act 2016:

- Recommend and facilitate development of power policies;
- consult the concerned Provincial Government, prior to taking a decision to construct or cause to be constructed a hydroelectric power station in any Province and to take decisions on matters pertaining to power projects set up by private sector or through public private partnership and other issues pertaining thereto;
3.2 Organogram

The Chief Executive Officer of PPIB is the Managing Director who is appointed by the Government of Pakistan. The Managing Director heads following Sections:

- **Projects Sections**
  The Projects Sections comprises of i) Hydropower Section, ii) Coal Section, iii) Thermal Section and iv) Transmission Line Section, each headed by a Director. These Sections deal with the matters related to processing and implementation of power generation projects based on Hydel and Thermal technologies (including Coal & RLNG) in the private as well as public sector under the applicable power policies of the GoP. They also administer the IPPs commissioned through PPIB under various policy frameworks. The Transmission Lines Section deals with the matters related to processing and implementation of Transmission Line projects under the applicable Policies of the GoP.

- **Legal Section**
  Deals with all legal affairs of the PPIB specifically the Security Package Agreements of the commissioned as well as upcoming IPPs.

- **HR & IT Section**
  Deals with the Human Resource, Information Technology and Administrative matters of PPIB and also coordinates with all other Sections for compilation of data.

- **Finance & Policy Section**
  Responsible for Financial and Policy matters. Looking after all aspects of Project Financing, this Section is also responsible for internal accounts and finance of PPIB, and assigned with developing draft power and infrastructure policies.

- **Corporate Affairs Section**
  Deals with the Corporate Affairs of the PPIB. Handling Pakistan Citizen’s Portal of Prime Minister’s Delivery Unit (PMDU), ECC / CCOE, CCI and Cabinet Decisions are major functions of this Section.

Possessing advanced degrees in their fields, wide variety of experience and dedication have groomed the employees of PPIB to a degree where with the expertise, which is a unique blend of engineering techniques, contract administration abilities, practice of solving legal riddles, project management proficiency, negotiation skills, financial dexterity and IT skills, enabling them to handle complex issues arising while administering the Security Documents comprising of, inter alia, Implementation Agreement(s), Power Purchase Agreement(s), Fuel Supply Agreement(s), Water Use Licence(s), Shareholders Agreement(s), Lease Agreement(s) Tripartite Agreement(s) etc. Functional organogram of PPIB is as shown below:

3.3 Board of Directors

Headed by the Federal Minister of Power Division as Chairman, the Board of PPIB is represented by high level officials from economic ministries, which include Secretaries from Power Division, Petroleum Division, Ministry of Finance and Planning Division, plus the Chiefs of Federal Board of Revenue (FBR), WAPDA and Chief Secretaries of Provinces and AJ&K. For maintaining a healthy balance, the Board also has the representation of Gilgit Baltistan and FATA in the decision making process while acknowledging significant amount of share in the current power generation capacity of country, private sector has also been made part of the Board by having one private sector member from each Province. However, after merger of FATA in the KP, the representation of FATA no longer exists in the Board of PPIB. Composition of the Board as provided vide PPIB Act 2012 is as follows:

- **Chairman Federal Minister for Power (Ministry of Energy)**
- **Members**
  - Secretaries of Power, Finance, Petroleum and Planning Divisions/Ministries
  - Chief Secretaries of Provinces and AJ&K
  - Chairman, FBR, Chairman WAPDA and MD PPIB
  - One representative each from the GoGB and FATA (after merger of FATA into KP the representation of FATA does not exist)
  - One Private Sector Member from each Province

Through collective intellect, the Board provides strategic direction to PPIB by granting approvals, guidance, roadmap and way forward towards performing various functions in accordance with the mandate of PPIB and in the light of PPIB Act 2012 while ensuring that goals and objectives are achieved efficiently. The members of various committees of the Board are listed as follows:
3.4 Committees of the Board

(A) Audit and Finance Committee
- Member from Ministry of Finance
- Member from Planning Division
- Member from Government of AJ&K
- Member from Government of Punjab
- Member from Government of Khyber Pakhtunkhwa

(B) Human Resource Committee
- Member from Government of Sindh
- Member from Ministry of Finance
- Member from Planning Division
- Member from WAPDA
- Member from Government of Balochistan

3.5 Management Team

- Mr. Shah Jahan Mirza, Managing Director
- Mr. Samsuddin Siddiqui, Senior Executive Director HR & IT
- Dr. Munawar Iqbal Kamboh, Director Projects Hydro
- Mr. Ali Nawaz, Director Projects Coal
- Mr. Safeer Ahmed, Director Finance & Policy
- Mr. Adil Sharif, Director Legal
- Mr. Khalid Umar, Director HR
- Mr. Adil Hameed, Director Projects Transmission Lines
- Mr. Faisal Mirza, Director Corporate Affairs

3.6 PPIB Office

Private Power and Infrastructure Board
Ground, 1st & 2nd Floors, Emigration Tower, Sector G-8/1, Islamabad
Tel. No. 051-9264034-45
Fax No. 051-9264030-31
Email: ppib@ppib.gov.pk
Website: www.ppib.gov.pk

3.7 Main Bankers
- Habib Bank Limited
- Meezan Bank Limited

3.8 Auditors
Riaz Ahmed and Company, Chartered Accountants
Pakistan’s Power Sector & PPIB’s Role
Pakistan’s Power Sector and PPIB’s Role

Historically power generation in Pakistan has been in the public sector, where two vertically integrated utilities namely Water and Power Development Authority (WAPDA) and Karachi Electric Supply Corporation (KESC) were operating the system. Keeping in view the electricity demand patterns and lack of financial resources in the public sector, the government of Pakistan decided to mobilize private sector resources by inducting it into power generation. In 1985, the government of Pakistan announced measures to encourage private sector participation in the power sector, when the 1292 MW Hub Power Project (Hubco) was initiated. Later, the Power Policy 1994 was announced under which the Private Power and Infrastructure Board was created to act as one-window facilitator for investors interested in setting up power generation and transmission line projects and to provide day to day support to IPPs which subsequently commissioned as a result of PPIB’s facilitation.

Role of PPIB is mainly of a facilitator for the private sector investors, and a mediator between different stakeholders of the power sector. PPIB assists IPPs in different areas vis-a-vis issuance of consents/approval from the relevant authorities for timely commissioning and proper functioning of the complex, provision of third party support for the prudent performance and timely payments to IPPs from the power purchaser and fuel supplier, to facilitate security arrangements, availability of foreign exchange, etc. In addition to these, PPIB also provides risk coverage against any political event and change in law materially affecting the company. PPIB arranges, and also facilitates GoP to organize conferences and seminars at national and international level to highlight investment opportunities in the private power sector of Pakistan and attract investment to this effect.

Pakistan’s power sector comprises of power plants established in the public as well as private sector. Pakistan’s primary energy mix comprises local Thar coal, Hydel, Solar, Wind, Nuclear, Imported Coal, Bagasse/Biomass and natural Gas/RLNG. As allied infrastructure, transmission network is a critical component of the power sector without which electricity cannot be transmitted to the load centres.

To cater for electricity requirements of the country, PPIB has always been a leading force of the GoP in implementing various initiatives under different policy frameworks announced from time to time. The brilliance of PPIB’s past performance is evident from the fact that by attracting an investment of US$ 20 Billion, PPIB has so far managed to facilitate induction of forty (40) IPPs of 17,551 MW which are based on different fuels i.e. hydro, local and imported coal, gas, RLNG & RFO. These IPPs were materialized under different policy frameworks which were announced in 1994, 1995, 2002 and 2015.

Map showing location-wise presence of commissioned and upcoming IPPs through PPIB is at Appendix-I. Policy-wise induction of IPPs through PPIB is illustrated in the below table:

### Power Policies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of IPPs</td>
<td>MW</td>
<td>No. of IPPs</td>
<td>MW</td>
<td>No. of IPPs</td>
<td>MW</td>
</tr>
<tr>
<td>17</td>
<td>6031</td>
<td>1</td>
<td>84</td>
<td>15</td>
<td>3183</td>
</tr>
</tbody>
</table>
Private Power and Infrastructure Board

ANNUAL REPORT

Graphic view of year wise inductions of IPPs is as under:

The IPPs materialized by PPIB are based on different fuels and technologies which is described in below table:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of IPPs</td>
<td>MW</td>
<td>No. of IPPs</td>
<td>MW</td>
<td>No. of IPPs</td>
</tr>
<tr>
<td>Hydel</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>84</td>
<td>2</td>
</tr>
<tr>
<td>Thar Coal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Imported Coal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gas</td>
<td>8</td>
<td>3248</td>
<td>-</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>RLNG</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Oil</td>
<td>9</td>
<td>2783</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>6031</td>
<td>1</td>
<td>84</td>
<td>15</td>
</tr>
</tbody>
</table>

Overall energy-mix which has been achieved by PPIB during 1994-till 30th June 2020 is illustrated in below image:

*As per PPIB's record, installed capacity of RFO/HSD based electricity is 3,993 MW, Natural Gas 4,972 MW and RLNG 3,633 MW.
After suffering from electricity shortfalls for several years, Pakistan has now entered into an era of surplus electricity in its system. Since emergency period is over, therefore, prevailing situation allows policy makers to take measures for developing power sector on sustainable footings. Accordingly, in order to avoid the problems caused by repeated cycles of power shortages, surpluses and mismatches in the development of various components of supply chain affecting the socio-economic development of the country, sustainable development of power system is being pursued by the GoP through integrated planning for optimal, affordable and secure development of the power sector. This approach includes accurately forecasting demand, adding generation capacity, improving transmission and distribution, systems, bringing costs down and ensuring sustainability. For the first time, comprehensive planning is being conducted on yearly basis in Pakistan in the form of the Indicative Generation Capacity Expansion Plan (IGCEP), which includes expansion planning studies that will be updated annually in order to retain accuracy in the wake of changing dynamics. The aim of the IGCEP is to optimize energy generation costs in order to ensure that adequate generation is added at a least-cost basis to meet future energy demands.

PPIB is keen to further increase the percentage of Thar coal and Hydro in the energy-mix and in this regard it is already involved in processing such projects which is evident from the below image:

The performance of PPIB towards discouraging future power generation based on expensive oil & depleting natural gas for power generation is further evident from the fact that during 2013 till June 2020, not a single oil based IPP was entertained and after 2014, no new natural gas based project was allowed by PPIB. In this perspective, the fuel-mix which was achieved by PPIB is a unique blend of indigenous, renewable and less expensive thermal (Hydro + Gas + RLNG + Coal) power generation projects. Detail is described in below image:

PPRB has been a top performing department of the GoP for developing power sector and has successfully unfolded various unaddressed chapters of the power sector. The same are captured below;


> PPIB has the distinction of successfully implementing Pakistan and AJ&K’s first Hydro IPP in 2008, later another two hydro IPPs were commissioned which include 147 MW Patrind and 102 MW Gulpur.

> Similarly, Pakistan’s first Thar Coal based IPP of 660 MW has also been processed and implemented through PPIB under Power Generation Policy 2015.

> PPIB has so far materialized three mega projects of 3,633 MW based on RLNG while another project of 1,263 MW is also about to be completed soon. These RLNG based projects were exclusively processed by PPIB under the IPP regime of the Power Generation Policy 2015 which is also a new chapter on the energy landscape of Pakistan.

> PPIB maintained its exclusiveness through private sector resource mobilization in the Transmission Line Sector of Pakistan. Under this initiative, PPIB is processing a mega project covering the distance of approximately 900 kilometers between Matiari (Sindh) and Lahore (Punjab). This project is not only the first private sector transmission line project but it would also be Pakistan’s first project which would be equipped with HVDC technology.

> PPIB is processing major chunk of CPEC energy segment comprising thirteen power generation projects of total 11,648 MW and the above mentioned Transmission Line Project carrying cumulative investment outlay of approximately US$ 20 billion.

> PPIB has also started processing small hydropower projects upto 50 MW generation capacity under Tripartite Letter of Support Retime of Power Generation Policy 2015. In this regard, initially two projects have already been issued TLOSs while several others are being processed for the same.
In addition to above, PPIB has been extensively involved in preparation of Policy Frameworks / guidelines, security documents, preparation of upfront tariffs etc. from time to time following world’s best practices for offering certain incentives, concessions and easies for the investors interested in power sector of Pakistan.

**Formulation of Policies / Guidelines**
- New Power Generation Policy 2015
- Policy Framework for Private Sector Transmission Line Projects, 2015
- National Power Policy 2013
- Policy for Power Generation Projects Year 2002
- Guidelines For Determination of IPPs Tariff
- Guidelines for Setting Up of Private Power Projects Under Short Term Capacity Addition Initiative 2010
- Procedure for development of Private Power Projects under Upfront Tariff Regime
- Guidelines for Sugar Mills for Co-Generation (Co-Cen) from Bagasse

**Preparation and finalization of Security Packages**
- R-LNG based Power Projects
- Coal based Power Projects
- Transmission Line Projects
- Supplemental Agreement for CPEC Projects
- Small Hydro IPPs

**Preparation of Upfront Tariff(s)**
- Imported & Local Coal based Power Projects
- Gas/RFO based Power Projects
- HVDC Transmission Line Project

The rich experience in dealing with sponsors and their respective lenders hailing from all over the world has given PPIB a unique foresight and vision. PPIB has published comprehensive reports on hydropower and indigenous coal potential/resources of Pakistan. These reports are serving as a major source of information/reference for policy makers as well as investors for developing future IPPs.

**Key Reports and Guidelines Published by PPIB**
- Hydropower Potential of Pakistan
- Hydropower Resources of Pakistan
- Pakistan Coal Power Generation Potential
- Thar Coalfield Sindh, Pakistan and Pakistan's Thar Coal Power Generation Potential.
PPIB has been a top performing department of the GoP for developing power sector and has
so far materialized three mega projects of 3,633 MW based on RLNG while another
project of 1,263 MW is also about to be completed soon. These RLNG based projects were
implemented through PPIB under Power Generation Policy 2015.

Similarly, Pakistan's first Thar Coal based IPP of 660 MW has also been processed and
carried the cumulative investment outlay of approximately US$ 20 billion. Transmission Line Sector of Pakistan. Under this initiative, PPIB is processing a mega project
covering the distance of approximately 900 kilometers between Matiari (Sindh) and Lahore
implemented through PPIB under Power Generation Policy 2015.

PPIB maintained its exclusiveness through private sector resource mobilization in the
power sector of Pakistan. Later, PPIB handled 2002 Power Policy quite effectively and now implementing Power

PPIB handled 2002 Power Policy quite effectively and now implementing Power
Generation Policy 2015 and Transmission Line Policy 2015. In this regard,
initially two projects have already  been issued TLOSs while several others are being processed
under Tripartite Letter of Support Retime of Power Generation Policy 2015. In this regard,
also be Pakistan's first project which would be equipped with HVDC technology.

For the inclusion of these new projects in the Renewable Energy policy of the Government of Pakistan,
more than 6000 MW of capacity is about to come into service from renewable sources, carrying cumulative investment outlay of approximately US$ 20 billion.

the transmission line project from Thar to Multan which is also a new chapter on the energy landscape of Pakistan.

also be Pakistan's first project which would be equipped with HVDC technology.

The rich experience in dealing with sponsors and their respective lenders hailing from all over the
world has given PPIB a unique foresight and vision. PPIB has published comprehensive reports on
preparation and finalization of Security Packages. These reports are serving as a major
source of information / reference for policy makers as well as investors for developing future IPPs.

In line with the government's policy to accelerate the development of power sector, the
"Initiative 2010" was formulated to attract foreign investors into the country. The initiative
was developed especially to encourage foreign investors to take up projects in the power sector.

Similarly, the "National Power Policy 2013" affords policy instruments for promoting renewable
energy development in Pakistan. In view of this, the role of PPIB in the formulation and
management of power sector policies has become more prominent.

In the domain of policy formulation, PPIB has been instrumental in the preparation of various
reports and guidelines, which have played a significant role in the development of power sector.

• Key Reports and Guidelines Published by PPIB

  - Pakistan Coal Power Generation Potential
  - Hydropower Resources of Pakistan
  - Renewable Energy Policy 2013
  - National Power Policy 2013
  - Policy for Power Generation Projects Year 2002
  - Guidelines for Setting Up of Private Power Projects Under Short Term Capacity Addition
  - Supplemental Agreement for CPEC Projects
  - Guidelines For Determination of IPPs Tariff
  - National Policy for Power Co-Generation by Sugar Industries and Guidelines for
  - Prepared Security Packages
  - Guidelines for Determination of IPPs Tariff
  - Prepayment of Upfront tariff(s) etc. from time to time following world's
  - HVDC Transmission Line Project
  - Gas/RFO based Power Projects
  - Imported & Local Coal based Power Projects

Meetings of the Board
In addition to above, PPIB has been extensively involved in preparation of Policy Frameworks / source of information / reference for policy makers as well as investors for developing future IPPs. This has given PPIB a unique foresight and vision. PPIB has published comprehensive reports on

- The Thar Coalfield Sindh, Pakistan and Pakistan’s Thar Coal Power Generation Potential.
- Pakistan Coal Power Generation Potential
- Preparation of Upfront Tariff(s)
- Preparation and finalization of Security Packages
- Formulation of Policies / Guidelines

### Meetings of the Board

During the financial year 2019-20, five meetings of the Board of PPIB were held under the chairmanship of honourable Minister for Power Division, Ministry of Energy who is also the Chairman of PPIB. Brief on key decisions taken during 124-128th meetings of the Board is as follows:

### 124th Meeting held on 15th July 2019

- The Board granted extension in Financial Closing date of following projects:
  - 700.7 MW Azad-Pattan Hydropower Project (extension up to 31st December 2020)
  - 330 MW Thal Nova Private Limited Coal Power Project (extension up to 31st December 2019)
- The Board approved PPIB Annual Budget for FY 2019-20
- The Board approved issuance of NOC to National Power Parks Management Company Ltd
- The Board approved the drafts of proposed amendments to the CoP implementation Agreement, the CoP Guarantee and allowed PPIB to provide consent to amendment to incorporate the Novation related changes in the Water Use Agreement.
- The Board approved audited accounts for FY ended June 30, 2018

### 125th Meeting held on 29th August 2019

- The Board granted extension in Financial Closing date of following projects:
  - 330 MW Thar Coal Power Project at Thar Block-II Sindh by Thar Energy Limited (extension up to 8th March 2020)
  - 330 MW Thar Coal Power Project by Siddiqsons Energy Ltd (extension up to 28th February 2020)
- The Board advised PPIB to consider hiring required expertise for Development of Framework for Conduct of ICB for Transmission Line & Grid Station / Converter Station Projects Under Transmission Line Policy 2015
- The Board approved PPIB Annual Report 2018
- The Board approved salary progression of employees in Staff Scale stuck at maximum of scale
- The Board sought opinion of Law Division regarding implementation of Service Quota of Baluchistan in All Federal Ministries / Divisions / SOEs and their Regional / Provincial Offices
- The Board approved creation of two positions in staff grade (SG-IV) for disabled persons
- The Board approved allocation of 44 MMCFD gas, available from Mari gas field after vacation of interim order by Sindh High Court, to Mari Petroleum Company Limited (MPCL). The Board also recommended to Power Division to allocate 66 MMCFD additional Mari Deep Gas approved by the ECC for power generation, to MPCL
The Board granted extension in Financial Closing date of following projects:
- 1320 MW Thar Coal Power Project by M/s Thar Coal Block-1 Power Generation Company (Pvt) Limited (extension up to 31st December 2019)
- 1263.2 MW R-LNG Based Independent Power Generation Project near Trimmu Barrage, District Jhang, Punjab (extension up to 24th July 2020)

Board approved the changes/improvements in the previously approved Implementation Agreement (IA) and authorized signing/execution of the IA and the Supplemental Agreement to the IA (SIA) by the Managing Director PPIB with Thar Coal Block-1 Power Generation Company (Pvt) Limited

Board constituted a five Member Committee under Secretary Power Division with Sr. Joint Secretary, Finance Division, Member Energy Planning division, CEO CPPA-G and MD PPIB as Members. The Committee will discuss the matter with 1124 MW Kohala Hydropower Project (KHCL) and work out an amicable solution for all pending matters.

Board directed PPIB to initiate the process of inviting EOI and to hire the required consultancy/advisory expertise for conduct of first ICB for Transmission Line and SS/GS or CS Projects, and for development of whole framework including EOI, RFP and SPDs etc., in collaboration with NTDC. Board further advised PPIB to arrange funds for the required services/assignments either through PSDP or its own resources.

Board directed CEO CPPA-G to ensure payment of half the payable amount by 15th December 2019 to 84 MW Laraib Energy’s Hydel Project so that the Working Capital Requirements do not arise. Board constituted a Committee comprising of Sr. Joint Secretary Finance Division, MD PPIB and CEO CPPA-G as Members. The Committee will consider and evaluate the actual need for raising Working Capital in the context of Company’s financials and other necessary parameters and share its findings/recommendations with Power Division which will subsequently be presented for consideration/approval of the Board.

Board ratified the approval of the Chairman PPIB/Federal Minister for Energy (Power Division) for drawing the salary and privileges of MD PPIB by Mr. Shah Jahan Mirza during the period of look after charge from 21st March 2019 to 17th July 2019.

Board granted special relaxation in the experience for the position of Board Secretary from 12 years to 10 years.
(ii) Board granted extension in the timelines of relevant milestones and validity of LOIs of following Hydro Power projects;
  - 640 MW Mahl
  - 450 MW Athmuqam
  - 82.25 MW Turtonas-Uzghor

(iii) Board directed that a clear determination from the Attorney-General of Pakistan be obtained, through the Power Division, in the matter of return or encashment of the Performance Guarantee provided by M/s Fatima Energy Limited

(iv) Board constituted a subcommittee comprising of Member Energy, Planning Commission; Secretary Energy, GoKPK; Joint Secretary, Ministry of Energy (Petroleum Division); and CFO, CPPA-G to review the Draft Standardized Security Agreements for Small Hydropower Projects

(v) Board appointed Mr. Fawad Hassan for the position of Board Secretary

---

128th Meeting held on 19th June 2020

---

(i) Board authorized submission of the Summary for seeking approval from ECC and approved the project-specific GoP Implementation Agreements as duly negotiated / finalized with Kohala Hydropower Company Private Limited (KHCL) and Azad Pattan Power Private Limited (APPL).

(ii) Board approved the Audited accounts of PPIB for the year ended June 30, 2019

(iii) Board approved PPIB’s Budget for the Year ending June 30, 2021
Implementation of Hydropower IPPs
Implementation of Hydropower IPPs

A sustainable energy supply has both direct and indirect impact on all sectors of the economy. Pakistan is successfully overcoming energy crisis through increase in generation as well as in transmission capacity of the system. The current gap between the demand-supply needs to be filled up alongwith improvements in the energy mix at a lower cost. The country’s dependence on RFO and natural gas in the overall energy-mix is gradually declining which may be attributed to depleting natural gas reserves as well as due to the introduction of LNG since 2015, while RFO being expensive imported fuel. On the other hand, the share of hydro and nuclear has increased in the energy-mix in FY 2020. Such historical variability for each energy source in the energy-mix of the country has been used to formulate the Integrated Energy Plan which will not only help in envisioning energy demands and respective supply paths of the future but also to formulate evidence based long term policy options. Energy security demands expansion, diversification and localization of energy sources for a sustainable energy system.

To have sustainable energy supply, an increased access to modern forms of energy is required for fostering development and to curb natural resource degradation. Hydropower is one of the more important renewable energy resources for generating electricity, decarbonizing the power system and fostering development and to curb natural resource degradation. Hydropower is one of the more important renewable energy resources for generating electricity, decarbonizing the power system and fostering development and to curb natural resource degradation. Hydropower is a mature technology and expected to remain the world’s largest source of renewable electricity generation, yet it continues to evolve.

As the world’s largest source of renewable electricity with unique storage and flexibility services to support the integration of variable renewables, hydropower can play an integral role in the recovery effort and the clean energy transition. Looking ahead, hydropower is key to the energy plans of many countries including Pakistan to address energy poverty and increase access to reliable, affordable and cleaner electricity. Besides electricity, hydropower projects deliver a range of benefits to the society and the environment. Over and above electricity generation, power-related benefits include flexible generation and storage, as well as reduced dependence on fossil fuels and avoidance of pollutants. Situated in remote places, hydropower projects uplift these areas by promoting economic development, creating employment and improving livelihoods. Such projects deliver investment in transportation, education and health services, tourism and recreation, while boosting national macroeconomic growth and opportunities for trade. Communities benefit from safely managed water for homes, industry and agriculture, and flood and drought mitigation. Thus, a hydropower project designed and built for power generation will often find multiple other uses over its lifetime. It is a globally established fact that hydropower projects are characterized with a variety of technical and economic constraints and bottlenecks; these include hydrological risks, resettlement, land acquisition and environmental issues, longer development and construction periods, seasonal reduction and variation in generation capacity and financing problems etc. However, despite such challenges, significant attention is being given both at federal as well as provincial levels for harnessing maximum potential and PPIB as a key department of the GoP is playing lead role in tapping maximum potential, thus bagging significant laurels.

The hydropower resources in Pakistan are mainly located in the mountainous areas in northern region of the Country. The hydropower resources in the south are being scarce and mainly comprise of small to medium schemes on barrages and canal falls. Hydropower resources of Pakistan can be divided into following six regions:

- Khyber Pakhtunkhwa
- Punjab
- Azad Jammu & Kashmir
- Gilgit-Baltistan
- Sindh
- Balochistan
So far 9,861 MW have been tapped out of an identified hydropower potential of 60,000 MW in Pakistan which is 16.4% of the total potential from which contribution of public sector in the said growth is 9,389 MW (15.64%) while private sector share comes to 472 MW (0.78%).

As per government policy, PPIB has stopped processing new projects on oil and other imported fuels for power generation, therefore, hydropower contribution in the national energy-mix would witness significant growth in future. Since commissioning of three projects of 333 MW by PPIB till now, several projects have reached at advance stages of development which include 720 MW Karot, 884 MW Suki Kinari, 1,24 MW Kohala and 700 MW Azad Pattan which are being expedited by PPIB for early commissioning. Overall, PPIB’s portfolio of upcoming hydropower projects comprises of fourteen (14) projects of 6,175 MW. Pakistan’s energy-mix for the period upto June 2020 is illustrated below alongwith the comparison of PPIB’s achieved energy-mix with the planned mix as per its portfolio:

Some new hydropower projects are lined-up to be initiated by PPIB in accordance with the IGCEP which represents the first complete iteration of an integrated planning exercise for the power sector of the country and will be revised every year on the basis of ground realities including growth trajectory, consumption patterns and completion or delays in projects to ensure regulatory compliance.

Since medium to large size hydropower projects involve longer gestation periods as well as huge investments, therefore, in order to tap hydropower potential from small to medium size projects with
lesser construction periods etc, PPIB has also started processing small hydropower projects having generation capacity of below 50 MW under the Tri-partite Letter of Support (LOS) regime of Power Generation Policy 2015. Through this arrangement, a Tripartite LOS will be issued to the projects sponsors/companies and PPIB will facilitate them in establishing private power projects and related infrastructure through signing Implementatation Agreement and issuing GoP Guarantee under the provisions of Power Generation Policy 2015. This initiative will attract and encourage potential investors in developing small to medium size hydropower power projects in the country.

The current portfolio of hydropower projects being processed by PPIB includes projects ranging from 7 MW to 1,124 MW of generation capacity which are located in Khyber Pakhtunkhwa, AJ&K and Punjab. Detail of current assignments of PPIB for processing private hydropower generation projects is portrayed in the below image:

The ongoing hydropower projects are planned to be completed during 2019-2028, however, the COVID-19 factor may slightly impact on these timelines which may be determined after substantiating the impact of the crisis.

The active portfolio of hydropower projects also includes projects which are being processed by PPIB under the framework of CPEC. Overall four major hydropower projects of aggregate capacity of 3,428 MW are included in CPEC which are being handled by PPIB. From these, two projects of 1,604 MW are under advance stages of construction while remaining two projects of 1,824 MW are about to achieve Financial Close after which construction work on these projects will also start. PPIB in collaboration with provincial and federal stakeholders, is proactively working on these projects so that least impact of COVID-19 occurs and plants continue progressing steadily.
The contribution of hydropower projects in overall CPEC energy chapter assigned to PPIB is 29%. The image below briefly illustrates the energy-mix committed under the CPEC framework:

The status of hydropower projects being processed by PPIB under CPEC framework is as follows:

<table>
<thead>
<tr>
<th>Hydropower Projects</th>
<th>Pre-LOS Stage</th>
<th>LOS Stage</th>
<th>Construction Stage after FC</th>
<th>Commissioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Projects</td>
<td>-</td>
<td>2 Projects</td>
<td>2 Projects 1,824 MW</td>
<td>-</td>
</tr>
<tr>
<td>3,428 MW</td>
<td></td>
<td>1,604 MW</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Due to prompt, efficient and expert facilitation even during the COVID-19 outbreak, various hydropower IPPs have succeeded in accomplishing critical milestones during the financial year 2019-20. These included not limited to, achievement of different pre-requisites for achieving critical milestones including but not limited to issuance of LOI/LOS, determination of tariff, Generation Licenses, getting NOCs from respective environmental protection agencies, signing of security package agreements (PPA, WUA, FSA), Implementation Agreements, Direct Implementation Agreements, Supplemental Implementation Agreements, land acquisition, dealing with security issues, achievement of Financial Close etc. PPIB vigilantly monitors post financial close phase of IPPs as well through soliciting monthly progress reports from IPPs and also through regular site visits.

For optimizing hydropower development in the country, two agreements have been signed between the Government of Pakistan (Economic Affairs Division (EAD), the Agence Française De Développement (AFD), France and PPIB on 11th February 2020. The Financing Agreement was signed between EAD and AFD while the Project Agreement signed between PPIB and AFD. Under the said agreements, AFD will provide grant of 500,000€ to PPIB for improvement of expertise and for implementation of hydropower projects more efficiently. The agreed areas of support for technical assistance include preparation of mechanism for tariff based bidding for hydropower projects, hiring of consultant to assist Panel of Experts (POE) on review of Feasibility Study for hydropower projects and capacity building of PPIB employees.

The list of ongoing hydropower projects as graphically represented in preceding pages, being implemented by PPIB is as follows while brief introduction and status of each of the IPP showing major activities / achievements is broadly given in succeeding pages:
### ANNUAL REPORT

**Private Power and Infrastructure Board**

---

### Gulpur Hydropower Project

*The Project is located on River Poonch in district Kotli, AJ&K and its development under 2002 Power Policy is sponsored by renowned Korean investors KOEN, DAELIM & LOTTE along with debt financing by renowned lenders KEXIM, ADB, IFC, CDC. Project has the capability of generating energy of 102 MW. Subsequent to the achievement of Financial Closing on 30th October 2015, the Project construction was completed, and plant commissioned on 10th March 2020.*

#### Salient features of project are as follows:
- **Project Company:** Mira Power Limited
- **Sponsors:** Korea South East Power Company, DAELIM Korea, and LOTTE Korea
- **Location:** Poonch River, Kotli, AJ&K
- **Capacity:** 102 MW
- **Energy:** 466 GWh
- **Project Cost:** US$ 317.77 million
- **Applicable Policy:** 2002

#### Key milestones achieved:
- **Issuance of LOS:** 27.04.2010
- **FC Date:** 30.10.2015
- **Commissioning Date:** 10.03.2020

#### Current Status:
Project has achieved certified Commercial Operation Date and it is fully operational now since 10th March 2020. Apart from electricity generation, Gulpur project is also paving way for providing employment to local manpower and growth of local industry. Project company is fulfilling its Corporate Social Responsibility by investing in building educational institutions for boys and girls, a major bridge connecting the area with the city of Kotli and training the locals with respect to biodiversity conservation.

---

### Project Details

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Project Name</th>
<th>Capacity (MW)</th>
<th>Status as on 30.06.2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gulpur</td>
<td>102</td>
<td>Commissioned</td>
</tr>
<tr>
<td>2.</td>
<td>Riali-II</td>
<td>708</td>
<td>Under FC</td>
</tr>
<tr>
<td>3.</td>
<td>Karot</td>
<td>720</td>
<td>Under Construction</td>
</tr>
<tr>
<td>4.</td>
<td>Suki Kinari</td>
<td>884</td>
<td>Under Construction</td>
</tr>
<tr>
<td>5.</td>
<td>Kathai-II</td>
<td>8</td>
<td>Under FC</td>
</tr>
<tr>
<td>6.</td>
<td>Azad Pattan</td>
<td>700.7</td>
<td>Under FC</td>
</tr>
<tr>
<td>7.</td>
<td>Kohala</td>
<td>1124</td>
<td>Under FC</td>
</tr>
<tr>
<td>8.</td>
<td>Ashkot</td>
<td>300</td>
<td>Under Evaluation</td>
</tr>
<tr>
<td>9.</td>
<td>Mahl</td>
<td>640</td>
<td>Under LOS</td>
</tr>
<tr>
<td>10.</td>
<td>Athmuqam</td>
<td>450</td>
<td>Under LOS</td>
</tr>
<tr>
<td>11.</td>
<td>Turtonas-Uzghor</td>
<td>82</td>
<td>Under LOS</td>
</tr>
<tr>
<td>12.</td>
<td>Kaigah</td>
<td>548</td>
<td>Under LOS</td>
</tr>
<tr>
<td>13.</td>
<td>Chakothi-Hattian</td>
<td>500</td>
<td>To be advertised</td>
</tr>
<tr>
<td>14.</td>
<td>Rajdhani</td>
<td>152</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Neckherdim-Paur</td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

**Total (MW): 6,277**
Karot Hydropower Project

720 MW Karot Hydropower Project is a run of river project which is being built on River Jhelum under the provisions of Power Generation Policy 2002. It is a dual boundary project located between District Rawalpindi Punjab and District Kotli, AJ&K. It is being developed by M/s Karot Power Company (KPCL), a special purpose vehicle in which China Three Gorges South Asia Investment (CSAIL) holds a majority share. CSAIL was established by China’s state-owned China Three Gorges Corporation’s (CTGC) overseas intermediary, China Three Gorges Investments, while CTGC was founded to build Three Gorges Project, the world’s biggest hydroelectric power plant, at 22.5GW capacity in China. Karot Project will bring Foreign Investment of around US$1700 Million to the country and it is being financed through Debt Equity ratio of 80:20%.

Salient features of project are as follows:

- Project Company: Karot Power Company (Pvt.) Limited
- Sponsors: China Three Gorges South Asian Investment Limited and Focus Power Investment Limited
- Location: Jhelum River, Dual boundary of District Rawalpindi, Punjab & District Kotli, AJ&K
- Capacity: 720 MW
- Energy: 3249 GWh
- Project Cost: US$ 1689 million
- Applicable Policy: 2002

Key milestones achieved

- Issuance of LOS: 29.08.2013
- FC Date: 22.02.2017
- River Closure: 22.09.2018

Current Status:

Construction activities at site are going at full pace. So far 75% construction work has been completed and efforts are being made to complete the Project by December 2021, however, due to Covid-19 Pandemic situation, Project Company has served notices for Force Majeure Event under project Agreements (GoPIA, etc).

Suki Kinari Hydropower Project

The 884 MW Suki Kinari HPP is located on river Kunhar, District Mansehra, Khyber Pakhtunkhwa. This Project is sponsored by China Gezhouba Group Company and M/s Haseeb Khan with the lending from Export-Import Bank of China and Industrial & Commercial Bank of China. Suki Kinari Hydropower project is ranked as first and the largest hydro project of country and also the first amongst fleet of CPEC hydro based projects which achieved Financial Closing and started construction activities. The Project brings considerable foreign investment from China and will inject about 3129 Million clean, reliable and affordable units of electricity every year in the national grid.

Salient features of project are as follows:

- Project Company: SK Hydro (Pvt.) Limited
- Location: Kunhar River (a tributary of River Jhelum), District Mansehra, Khyber Pakhtunkhwa
- Capacity: 884 MW
- Energy: 3129 GWh
- Project Cost: US$ 1956 million
- Applicable Policy: 2002

Key milestones achieved

- Issuance of LOS: 19.07.2011
- FC Date: 31.12.2016
- River Closure: 30.09.2019

Current Status:

Construction activities at site are going at full pace. Project will be constructed in a period of six year, whereas, so far, 49.29% construction work has been completed and efforts are being made to complete the Project by December 2022.
Salient features of project are as follows:

- **Project Company:** Kohala Hydro Company (Private) Limited
- **Sponsors:** China Three Gorges South Asia Investment Limited (CSAIL)- China Three Gorges Corporation
- **Location:** Jhelum River, Dam/Weir near Siran & Power House near Barsala/Kohala
- **Capacity:** 1124 MW
- **Energy:** 5149 GWh
- **Project Cost:** US$ 2400 million
- **Applicable Policy:** 2002

The 1124 MW Run-off-the-River Kohala Hydro Power Project under the China Pakistan Economic Corridor (CPEC) is the largest foreign direct investment in any IPP of the country and also in AJ&K. Located in the north-east region of the country, the project is planned to be built in the Azad Jammu and Kashmir, on River Jhelum that flows into Azad Jammu and Kashmir. The weir/dam site is located in village Siran (near Hattian, District Jhelum valley) while the power house is in village Barsala (near Kohala Bridge, District Muzaffarabad). 1124 MW Kohala Hydropower Project is being developed by Kohala Hydropower Company Private Limited with China Three Gorges Corporation while China Development Bank and Habib Bank Limited are the lenders of this project.

**Key milestones achieved**

- interconnection Study: 03.03.2017
- EPC Stage Tariff Determination: 11.10.2018
- Execution of GoPIA: 25.06.2020
- Execution of TPPA: 25.06.2020

**Major Activities Planned for Next Fiscal Year:**

- Execution of AJ&KIA, AJ&KWUA
- Completion of Land Acquisition Process
- Execution of Financing and Insurance Documents
- Execution of Direct Agreements to the GoPIA, TPPA, AJ&KIA, AJ&KWUA
- Approval of Term Sheet
- Financial Closing

**Current Status:**

For declaration of Financial Closing by PPIB, the project is in the process of achievement of various critical milestones as outlined above. However, this project is facing delays due to various factors which mainly include Environmental Flow and execution of project agreements. Kohala hydropower project is set to be commissioned by June 2026.
700 MW Azad-Pattan Hydropower Project is a run of the river hydropower project located on River Jhelum on dual boundary of AJ&K and Punjab having capability to add clean, reliable and affordable 3.265 Billion units of electricity per year to the national grid. The Project is located very close to the load center and will be connected to the national grid through 500 kV transmission line and it is being developed under the Policy for Power Generation 2002 on Build-Own-Operate-Transfer (BOOT) model. This Project is an integral part of the China Pakistan Economic Corridor (CPEC) Programme as well.

**Salient features of project are as follows:**

- **Project Company:** Azad-Pattan Power Private Limited
- **Sponsors:** M/s Power Universal Investment Company Ltd, China Gezhouba Group Company (CGGC Overseas & CGGC Engineering), Laraib Energy Limited Pakistan
- **Location:** River Jhelum, District Sudhnoti, Azad Jammu & Kashmir
- **Capacity:** 700.7 MW
- **Energy:** 3.265 GWh
- **Project Cost:** US$ 1350 million
- **Applicable Policy:** 2002

**Key milestones achieved**

- Issuance of LOS: 30.06.2016
- Approval of Grid interconnection Study: 10.11.2017
- Environmental NOC (Punjab): 19.03.2018
- Environmental NOC (AJ&K): 28.03.2018
- EPC Stage Tariff Determination: 11.11.2018
- Execution of TPPA: 25.06.2020

**Major Activities Planned for Next Fiscal Year:**

- Execution of COP IA, AJ&K IA, AJ&K WUA, Punjab WUA
- Completion of Land Acquisition Process
- Execution of Financing and Insurance Documents
- Execution of Direct Agreements to the COPIA, TPPA, AJ&KIA, WUAs
- Approval of Term Sheet
- Financial Closing

**Current Status:**

For declaration of Financial Closing by PPIB, the project is in the process of achievement of various critical milestones as outlined above. Azad Pattan project is set to be commissioned by June 2026. Reluctance of Sinosure is one of the factors which is affecting the progress.
Mahl Hydropower Project

The 640 MW Mahl Hydropower Project is located at about 5 km upstream of the confluence of Mahl Nullah and Jhelum River. Jhelum River forms the boundary between the Pakistani provinces of Punjab and Khyber Pakhtunkhwa, and Azad Jammu & Kashmir. The Project falls within both provinces of Pakistan as well as A&JK. Under the Policy for Power Generation Projects 2002, the Mahl Project is being sponsored by the investment arms of China Three Gorges Corporation including China Three Gorges South Asia Investment Limited (CSAIL), the main sponsors and China Three Gorges International Corporation (CTGI).

Salient features of project are as follows:

- **Project Company:** Mahl Hydropower Company Private Limited
- **Sponsors:** China Three Gorges South Asia Investment Limited, China Three Gorges International (subsidiaries of China Three Gorges Corp), and Trans Tech Pakistan
- **Location:** River Jhelum on tri-boundary of A&JK, Punjab and KP
- **Capacity:** 640 MW
- **Energy:** 2676 GWh
- **Project Cost:** US$ 993 million
- **Applicable Policy:** 2002

**Key milestones achieved**

- Approval of Feasibility Study: 24.07.2017
- Approval of Grid Interconnection Study: 29.12.2017
- Feasibility Stage Tariff Determination: 30.10.2019
- Environmental NOC (KPK): 09.08.2019

**Major Activities Planned for Next Fiscal Year:**

- Environmental Approvals of Punjab and A&JK
- Issuance of Letter of Support (subject to IGCEP timeline to be approved by NEPRA)

**Current Status:**

PPIB is targeting to complete this project by Jun 2028, however delay in approval of IGCEP is also affecting the project.

Athmuqam Hydropower Project

The 450 MW raw-Site Athmuqam Hydropower Project is identified to be located on river Neelum (in the river stretch from Ashkot up to Dudhnial), A&JK, in accordance with provisions of Policy for Power Generation Projects 2015. A consortium of Korean investors comprising Korea Hydro & Nuclear Power Co. Limited (KHNP), DEALIM Industrial Co. Limited (DAELEIM) and LOTTE Engineering & Construction Co. Limited (LOTTE ) is collectively sponsoring this project. PPIB issued Letter of Interest to Sponsors on 30th March 2017 for preparation of bankable feasibility study, obtaining feasibility stage tariff determination and Letter of Support.

Salient features of project are as follows:

- **Sponsors:** Korea Hydro and Nuclear Company, DEALIM and LOTTE, Korea
- **Location:** River Neelum, District Neelum, Azad Jammu & Kashmir
- **Capacity:** 450 MW
- **Energy:** 1982 GWh
- **Project Cost:** US$ 1300 million (proposed)
- **Applicable Policy:** 2015

**Key milestones achieved**

- Issuance of LOI: 30.03.2017
- Approval of Feasibility Study: 03.09.2017
- Submission of Feasibility Stage-1 tariff proposal: 30.10.2019

**Major Activities Planned for Next Fiscal Year:**

During this fiscal year the feasibility study was completed by sponsors and approved by PPIB. In parallel for financing arrangement, the sponsors succeeded to obtain interest of lenders like IsDB, DEG_KfW, OeKB, UBL. Feasibility Stage-1 tariff proposal was submitted to Power Purchaser however did not process further due to non-availability of approved IGCEP.
**Current Status:**
After completion of Feasibility Study and its approval accorded by PPIB/POE, Sponsor has applied to NEPRA for Feasibility Study stage tariff and grant of Generation Licence for the Project on 3rd February 2020 and 18th February 2020 respectively. Delay in approval of IGCEP is also adversely affecting the project.

### Key milestones achieved
- **Issuance of LOI:** 20.03.2017
- **Approval of Feasibility Study:** 03.06.2019
- **Re-submission of petition for Feasibility Stage Tariff to NEPRA:** 03.02.2020
- **Submission of request to NEPRA For issuance of Generation License:** 18.02.2020

### Salient features of project are as follows:
- **Sponsors:** Sinohydro-Sachal Consortium
- **Location:** Golen Gol River, Chitral Valley KP
- **Capacity:** 82.25 MW
- **Applicable Policy:** 2015

---

**Riali-II Small Hydropower Project**

Riali Hydropower is proposed on the Chorivala Katha Stream, a right bank tributary of Neelum River with its confluence with Neelum River about 15 kms upstream of Muzaffarabad near Ghori Bazar. The project is proposed in the lower reach of Chorivala Katha with intake near village Bagh and Powerhouse near village Cheri 400 meters upstream of the confluence of Chorivala Katha with Neelum River. Riali Hydro Power Company (Private) Limited (RHIPOC) is a project venture of the Sachal Group. The company is a special purpose vehicle (SPV) to set up a Run-Off-The-River 7.08 MW Hydropower Plant (HPP) near Muzaffarabad [the Project]. The Project shall be implemented on BOOT (Build, Own, Operate and Transfer) basis under Power Generation Policy 2015 with a concession period of thirty years after construction period of three years.

### Key milestones achieved
- **Issuance of LOI:** 26.04.2004
- **Approval of Feasibility Study:** 09.11.2016
- **EPC Stage tariff Determined by NEPRA:** 20.11.2018
- **Approval of PPIB Board for issuance of LOS:** 06.05.2019
- **Issuance of LOS (Tripartite LOS) by PPIB:** 16.10.2019

### Salient features of project are as follows:
- **Sponsors:** Sachal Engineering Works (Pvt.) Ltd, Pakistan
- **Location:** Ghori Wala Katha, Muzaffarabad, Azad Jammu & Kashmir
- **Capacity:** 7.08 MW
- **Applicable Policy:** 2015

### Current Status:
After CPPA-G consent issued on 26th May 2017 for purchase of power, Transmission line study has been completed and submitted to PESCO for approval/endorsement. Sponsors have already started construction at project site. Sponsors are in the process of achieving Financial Close and execution of project agreements etc., under the LOS. For timely completion of project, the sponsors have already started construction work prior to achievement of Financial Close with their equity share.
Current Status:
Sponsors are in the process of achieving the Financial Close and execution of project agreements etc., under the LOS.

Key milestones achieved
- Issuance of LOI by GoAJ&K: 06.06.2012
- Approval of Feasibility Study: 09.11.2016
- EPC Stage tariff Determined by NEPRA: 22.11.2018
- Approval of PPIB Board for issuance of LOS: 06.05.2019
- Issuance of LOS (Tripartite LOS) by PPIB: 20.11.2019

Salient features of project are as follows:
- Location: Upstream of existing Kathai-I Hydropower Station on Kathai Nullah, District Hattian, Azad Jammu & Kashmir
- Capacity: 8.0 MW
- Applicable Policy: 2015

Kathai-II Hydropower Project is to be located on Upstream of existing Kathai-I Hydropower Station on Kathai Nullah, District Hattian, Azad Jammu & Kashmir. Kathai-II Hydro (Pvt) Limited is a SPV under project venture of M/s JDW Sugar Mills Ltd. to set up Run-Off-The-River 8.0 MW Hydropower Plant (HPP) in District Hattian, AJ&K. This project shall also be implemented on Build, Own, Operate and Transfer (BOOT) basis under Power Generation Policy 2015 with a concession period of thirty years after construction period comprising of three years.

Key milestones achieved
- Issuance of LOI by GoAJ&K: 06.06.2012
- Approval of Feasibility Study: 09.11.2016
- EPC Stage tariff Determined by NEPRA: 22.11.2018
- Approval of PPIB Board for issuance of LOS: 06.05.2019
- Issuance of LOS (Tripartite LOS) by PPIB: 20.11.2019

The Ashkot Hydropower Project is identified as a raw site on the Neelum River near the village of Ashkot, some 75 Km from Muzaffarabad capital of AJ&K. The Project is owned by a SPV Ashkot Energy (Pvt) Limited and is being developed by the Laraib Group, the developer of the first hydro IPP of Pakistan i.e. 84 MW New Bong Escape Hydropower Project and the 700 MW Azad Pattan Hydro IPP.

Considering its capacity as 40 MW, the earlier development of the Project was initiated by the GoAJ&K. Later on, during the conduct of feasibility study, the capacity of the Project was optimized to 300 MW. It is worth mentioning that under the legal regime in AJ&K, the projects above 50 MW have been processed by PPIB in the capacity of Agent of the AJ&K Council. Therefore, the GoAJ&K requested for transfer of the Project to PPIB in the backdrop of optimized capacity. The Board of PPIB allowed PPIB to process the Project under the Policy for Power Generation Projects 2002. The Board further allowed PPIB to evaluate the technical and financial credentials of the Project Company/Sponsors for its consideration prior to issuance of Letter of Interest. Accordingly, the process for evaluating technical and financial credentials of sponsors through independent consultant has been initiated.

The Ashkot Hydropower Project is on hold due to delay in approval of IGECP by NEPRA. Once project is included in IGECP and thereafter, it is approved by the NPERA, the PPIB would be able to further process this projects. The Project entails Foreign Direct Investment of more than US$ 800 Million with the capacity of generating energy upto approximately 1347 Gwh per annum.
Implementation of IPPs based on Thar Coal
Implementation of IPPs based on Thar Coal

Coal remains a major component of global fuel supplies, accounting for 27% of all energy used worldwide and making up 37% of electricity generation. Figures from the IEA show that coal will still generate 22% of the world’s electricity in 2040 while in South East Asia, coal will fuel 39% of electricity in 2040, retaining coal’s position as the single largest source of electricity worldwide. Besides power generation, coal plays a crucial role in industries such as iron, cement and steel.

Reliable, affordable, and stable energy access is a key requirement for modern life, preserved by the UN’s Sustainable Development Goals, yet more than 3.5 billion people lack reasonably reliable access to electricity. Across the globe, coal is playing a fundamental role in providing access to baseload electricity – power that is constantly available – across the globe. There are four major types of coal available across the world:

- **Anthracite**: The highest rank of coal. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter.
- **Bituminous**: Bituminous coal is a middle rank coal between subbituminous (defined below) and anthracite. Bituminous coal usually has a high heating (Btu) value and is used in electricity generation and steel making in the United States.
- **Subbituminous**: Subbituminous coal is black in color and is mainly dull (not shiny). Subbituminous coal has low-to-moderate heating values and is mainly used in electricity generation.
- **Lignite**: Lignite coal, aka brown coal, is the lowest grade coal with the least concentration of carbon. Lignite has a low heating value and a high moisture content and is mainly used in electricity generation.

The best known high rank deposits of coal of Carboniferous age occur in Europe, Asia and North America and those of Permian age are located throughout the former continent of ”Gondwana Land” now Pakistan, India and Australia. Low rank deposits of sub-bituminous and lignite occur in Tertiary strata of Europe, North America, Australia, Asia and parts of South East Asia.

Some 97% of coal reserves of Pakistan are of lignite rank and vast deposits of these occur in Tharparker area of Sindh Province. Coal was first discovered across Pakistan and the rest of South Asia in the 1880s and was used by the British-owned railway companies under colonial rule. Later, post-colonial Pakistan had used coal to fuel its industry from independence to the discovery of the Baluchistan’s Sui gas field in 1952 and the Toot oilfield in 1964. With the discovery of massive 175.5 billion tonnes of coal potential in Thar area of Sindh in 1990s, Pakistan’s coal power potential has increased manifolds. Thar coalfield, one of the world’s largest lignite deposits is spread over more than 9,000 sq. kms with dimensions of 140 km. (northsouth) and 65 km. (east-west) comprise around 175 billion tonnes. If properly exploited, Pakistan’s coal resources may generate more than 100,000 MW of cheap electricity for decades to come. Coal - the black gold is spatially distributed in all the four provinces of Pakistan and in AJ&K. After discovery of massive lignite coal reserves in Sindh which possesses 99 percent of the total coal reserves of country, Pakistan has emerged as one of the leading country - seventh in the list of top 20 countries of the world. The vast reserves of coal in Pakistan and in Azad Jammu & Kashmir are depicted in the following graph:
Coal Potential in Pakistan

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Reserves in Million Tonnes</th>
<th>%age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sindh</td>
<td>185,456</td>
<td>99.7</td>
</tr>
<tr>
<td>Balochistan</td>
<td>217</td>
<td>0.11</td>
</tr>
<tr>
<td>Punjab</td>
<td>235</td>
<td>0.12</td>
</tr>
<tr>
<td>KP</td>
<td>90</td>
<td>0.04</td>
</tr>
<tr>
<td>AJ&amp;K</td>
<td>9</td>
<td>0.004</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>186,007</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Pakistan Energy Year Book 2019

So far coal has played a significant role in reducing dependence on the Pakistan's useful but limited supply of natural gas and to reduce burden on foreign exchange being spent on the costly import of oil. Enormous deposits of coal exist in the country while further exploration in different areas is in progress but so far, only a fraction of it is being utilized. The huge coal resources of the country can play an important role in meeting the energy demand for long time. Previously, inavailability of reliable coal was the main obstacle for attracting potential investors. However, CPEC being a true game-changer has been a catalyst for developing this unaddressed chapter and now, several coal mining and power generation projects are in process of development in Thar coalfield. Thar coal would help cut fuel imports, saving precious billions of rupees of foreign exchange, and would also provide reliable power round the clock to the national grid. Block-wise breakup of the Thar coal reserves is briefly defined in the image below:

<table>
<thead>
<tr>
<th>Specific Block/Field</th>
<th>Area (Sq.km)</th>
<th>Drill Holes</th>
<th>Reserves / Resources (Million Tonnes)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Measured</td>
<td></td>
</tr>
<tr>
<td>Block-I (Singhar</td>
<td>122.0</td>
<td>41</td>
<td>620</td>
<td>1,088</td>
</tr>
<tr>
<td>Vikian-Venna</td>
<td></td>
<td></td>
<td>944</td>
<td>1,028</td>
</tr>
<tr>
<td>Block-II (Singhoro</td>
<td>55.0</td>
<td>43</td>
<td>640</td>
<td>944</td>
</tr>
<tr>
<td>Block (United)</td>
<td></td>
<td></td>
<td>411</td>
<td>1,357</td>
</tr>
<tr>
<td>Block-III (Saleh Jo</td>
<td>935</td>
<td>41</td>
<td>411</td>
<td>1,357</td>
</tr>
<tr>
<td>Tar)</td>
<td></td>
<td></td>
<td>1,337</td>
<td>2,559</td>
</tr>
<tr>
<td>Block-IV (Sonal Baj)</td>
<td>800</td>
<td>42</td>
<td>637</td>
<td>1,640</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>282</td>
<td>2,559</td>
</tr>
<tr>
<td><strong>Sub Total (Block IV)</strong></td>
<td><strong>356.5</strong></td>
<td><strong>167</strong></td>
<td><strong>2,308</strong></td>
<td><strong>3,566</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>5,839</strong></td>
<td><strong>9,715</strong></td>
</tr>
<tr>
<td>Rest of Thar Coal</td>
<td>8,643.5</td>
<td>335</td>
<td><strong>4,717</strong></td>
<td><strong>13,362</strong></td>
</tr>
<tr>
<td>Field</td>
<td></td>
<td></td>
<td><strong>11,298</strong></td>
<td><strong>24,656</strong></td>
</tr>
<tr>
<td><strong>Total (Thar Coal Field)</strong></td>
<td><strong>9,000.0</strong></td>
<td><strong>502</strong></td>
<td><strong>7,025</strong></td>
<td><strong>112,700</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>17,130</strong></td>
<td><strong>175,505</strong></td>
</tr>
</tbody>
</table>

Since, 99% deposits of country's indigenous coal reserves lie in Thar, Sindh plus other factors like availability of better infrastructure and accesses to basic facilities, it is obvious to attract investors' attention. In addition to Thar coal based projects under CPEC, PPIB is processing another two Thar coal based projects which include 660 MW Lucky and 330 MW Siddiqsons project. All Thar coal based projects which are being undertaken by PPIB as represented in below image, carry an overall investment outlay of around US$ 7.5 billion.
Initially, 660 MW Lucky and 330 MW Siddiqsons were conceived as imported coal based plants, however, as a result of major shift in the policy of the GoP, a bar was put on new power generation projects on imported fuels except the projects that were finalized under the CPEC or mutually agreed between the governments of Pakistan and China. Accordingly, while considering the fact that both projects had already achieved significant progress they were allowed to convert on to Thar coal.

As a result of PPIB’s efficient handling of projects, majority of Thar coal based projects are either under construction or about to start construction. Out of the overall fleet, 660 MW Engro power Project has already been commissioned in July 2019 and has been ranked as the first ever Thar coal based IPP of the country as well as the first Thar coal based project under the CPEC umbrella that has been commissioned and started generating power. Similarly another two projects are under construction and expected to be completed in first half of 2021, however, there is a possibility of experiencing some delays in commissioning schedule of these projects due to the outbreak of COVID-19 Pandemic.

In addition to setting up coal power generation and mining projects, other activities/programs under Corporate Social Responsibility (CSR) are also being given due importance by all project sponsors through developing the social sector in Thar area. The sponsor are coordinating with various NGOs, UN offices private and government departments for carrying out various CSR activities in Thar area which includes education, health, livelihoods, water supply and skill development.

Currently, block-I, II and VI of Thar coalfield are hosting entire portfolio of project which are being undertaken by PPIB, however, development of more blocks of Thar coalfield in coming years would definitely attract more interest of potential investors. Current status of block wise allocation of projects is being shown in the below image:
The GoP is equally aware of its responsibilities for safeguarding the environment, therefore, latest/super critical technology based power plants are being installed first time in the country having minimum impact on the environment. In this regard, all sites of coal based power projects in Pakistan are subjected to detailed Environment Impact Assessment (EIA) to determine the impact on environment components including water, wind, soil, noise etc. These EIA reports are reviewed and approved by the concerned environmental protection agencies of the respective provincial governments to ensure that all rules, regulations and standards to safeguard environment are strictly adhered to.

Usage of coal for power generation vis-à-vis energy-mix in the global as well as Pakistan’s context is shown below. The other two pie charts depict PPIB’s achieved as well as planned energy-mix:

The above images highlight that expensive and imported fuels are gradually being tapered off from the energy-mix of country by replacing them with indigenous coal and hydro. Oil being highly expensive and natural gas due to rapid depletion have no more presence in PPIB’s portfolio of upcoming projects. From above images, it can be concluded that worldwide, although coal is still the leading source of power generation, however, in Pakistan, coal’s contribution in power generation has been 13% which is jointly shared by imported coal with 11% and Thar coal with 2%. With the completion of 300 MW Gwadar project, the percentage of imported coal would be marginally increased. However, with the gradual induction of hydro, Thar coal and other renewables, the presence of imported coal along with RFO/HSD would be further reduced from Pakistan’s energy landscape. In a bid to eliminate less prioritized fuels from the energy-mix of country, efforts are being made by PPIB for induction of more projects based on Thar coal and hydro under the IGCEP roadmap.

The list of upcoming Thar coal based power generation projects being processed by PPIB is as follows while brief introduction & status of each is given in the coming pages:
Engro Powergen Thar Private Limited (EPTL) was formed in 2014 to set up a 2 x 330 MW power project in Thar Block II, Sindh, Pakistan. The company is a joint venture between Engro Powergen Ltd (EPL), China Machinery Engineering Corporation (CMEC), Habib Bank Ltd (HBL), and Liberty Mills Limited. Engro project is amongst five (5) Thar coal based power generation projects which are included in the CPEC. The Sponsors of this project along with the Government of Sindh, have made a special purpose company, Sindh Engro Coal Mining Company (SECMC), which is developing first coal mine at Thar for power generation, and will supply Thar coal to this and other upcoming projects. By the grace of God and unparalleled efforts of the sponsors, the coal mining work on Phase 1 of Thar Block-II has been completed by SECMC on schedule, after unearthing of first coal layer in June 2018.

**Current Status:**
Engro Power project is a pioneering project in generating electricity using indigenous lignite coal from the Tharparkar district. After achieving COD on 10th July 2019, this project is now connected with the national grid and supplying cheap and reliable power to the country, thus opening avenues for power generation projects based on Thar coal. Engro project presently stands 3rd at NTDC merit order list.

**Key milestones achieved**
- Issuance of LOI: 20.11.2014
- Issuance of LOS: 17.04.2015
- FC Date: 04.04.2016
- Commissioning Date: 10.07.2019

**Salient features of project are as follows:**
- Project Company: Engro Powergen Thar Limited
- Sponsors: EPL, HBL, CMEC, Liberty Mills
- Location: Thar Block II, Sindh
- Capacity: 660 MW
- Project Cost: US$ 995.4 million
- Applicable Policy: 2015

---

Hub Power Company Limited having its well-known track record for developing various IPPs in Pakistan has now invested in developing 330 MW mine mouth lignite coal power project at Thar Block-II. The Project is being jointly sponsored by M/s Hub Power Company Limited, Fauji Fertilizer Limited and China Machinery and Engineering Corporation under the China-Pakistan Economic Corridor (CPEC) framework. The total cost of the Project is US$ 497 million while China Development Bank and Habib Bank Limited are the lead lenders. This important project is included in Priority projects of CPEC to be connected through ±660 kV Matiari-Lahore HVDC Transmission line.

**Current Status:**
The project is set to be completed by March 2021. The Financial close of the Phase-II of the Thar coal mine by SECMC has already been achieved in December 2019. In order to meet the completion timelines, sponsors had already initiated construction work at site prior to Financial Closing, which is in progress at full swing. Project is not likely to be completed within targeted timelines due to outbreak of COVID-19. Actual situation of delay would be cleared once the impact of Pandemic is substantiated.

**Key milestones achieved**
- Issuance of LOI: 02.08.2016
- FC Date: 30.01.2020

**Salient features of project are as follows:**
- Project Company: Thar Energy Limited
- Sponsors: Hub Power Company Limited, HBL, CDB, BAFL
- Location: Thar Block-II, Sindh
- Capacity: 330 MW
- Project Cost: US$ 497.7 million
- Applicable Policy: 2015
**Thar Coal based Power Project at Thar Block-II by M/s ThalNova Private Limited**

- **Current Status:**
  - The project is set to be completed by March 2021. After issuance of LOS to the project company by PPIB, the project is heading towards financial close. Project agreements which include IA, PPA, CSA have already been executed in 2017. However, project is facing delays and not likely to achieve COD by Mar-21. Delays are mainly attributed to factors including outbreak of COVID-19 pandemic while other factors include Sinosure, macroeconomic situation, delays in coal availability. PPIB as facilitator is playing its role for earliest resolution of issues which are hampering the progress.

**Key milestones achieved**

- **Project Company:** Thal Nova Power Thar (Pvt.) Limited
- **Sponsors:** Thal Power Private Limited, Novatex Limited & Descon Engineering Limited
- **Location:** Thar Block-II, Sindh
- **Capacity:** 330 MW
- **Project Cost:** US$ 497.7 million
- **Applicable Policy:** 2015

**Salient features of project are as follows:**

- Project Company: Thal Nova Power Thar (Pvt.) Limited
- Sponsors: Thal Power Private Limited, Novatex Limited & Descon Engineering Limited
- Location: Thar Block-II, Sindh
- Capacity: 330 MW
- Project Cost: US$ 497.7 million
- Applicable Policy: 2015

**Thar Coal based Power Project at Thar Block-I by M/s Shanghai Electric Group**

- **Current Status:**
  - After issuance of LOS by PPIB, the project is progressing towards Financial Close. Power Purchase and Implementation Agreements have been executed in August and December 2019 respectively while execution of Water Use Agreement with the Government of Sindh is in final stages. The financial close of the project is targeted to be achieved by September 2020. Despite problems in financing from Chinese side, the sponsors are trying their best to resolve the financing issues and complete the 660 MW capacity by August 2022 and the total of 1,320 MW by February 2023. Apart from COVID-19, project is facing difficulties with regard to water allocation and execution of Water Supply Agreement with Government of Sindh, and reluctance of Sinosure etc.

**Key milestones achieved**

- **Project Company:** Thar Coal Block-I Power Generation Co. Ltd.
- **Sponsors:** Shanghai Electric (Group) Corporation
- **Location:** Thar Block-I, Sindh
- **Capacity:** 1,320 MW
- **Project Cost:** US$ 1,912.2 million
- **Applicable Policy:** 2015

**Salient features of project are as follows:**

- Project Company: Thar Coal Block-I Power Generation Co. Ltd.
- Sponsors: Shanghai Electric (Group) Corporation
- Location: Thar Block-I, Sindh
- Capacity: 1,320 MW
- Project Cost: US$ 1,912.2 million
- Applicable Policy: 2015

**Private Power and Infrastructure Board**

This project is based on Thar Coalfields Block-I. M/s Shanghai Electric Group having rich experience in the field of power generation after forming an SPV namely Thar Coal Block-I Power Generation Co. Ltd. (TCB-I), is developing this 1320 MW power generation project. Sino Sindh Recourses Limited (SSRL) as mine developer is the coal supplier for the project. The project is also included in the Priority List of CPEC projects. The project amongst others will be connected through ±660 kV Matiari-Lahore HVDC Transmission line.
Thar Coal based Power Project at Port Qasim by M/s Lucky Electric Power Company Limited

Lucky Group is actively developing the project with the support and guidance of PPIB. The Project was earlier issued Letter of Support in June 2015 for developing the 660 MW Power Project at Port Qasim based on imported coal. However, in accordance with the directions of PPIB Board to reduce dependence on imported coal, M/s Lucky Electric Power Company Limited agreed to develop the Project on Thar Coal. Accordingly, the Project was converted to local Thar coal on the same site (Port Qasim), through an amendment in LOS. The Project will utilize coal from Thar Block-II. Lucky would be a model project in a way that it will use Thar coal but will be located in Port Qasim, Karachi.

Salient features of project are as follows:
- Project Company: Lucky Electric Power Co. Ltd
- Sponsors: Lucky Cement Limited
- Location: Port Qasim, Near Karachi
- Fuel: Thar Coal from Block-II
- Capacity: 660 MW
- Project Cost: US$ 1,080.9 million
- Applicable Policy: 2015

Current Status:
The Project achieved FC in June 2018 with expected COD in March 2021. By June 2020, the IPP has achieved 80% completion of construction work at site and expected to start its commissioning run tests in the near future.

Key milestones achieved
- Issuance of LOI: 11.02.2015
- Issuance of LOS: 08.06.2015
- FC Date: 25.06.2018

Thar Coal based Power Project at Thar Block-II by M/s Siddiqsons Energy Limited

Initially the project was based on imported coal with a capacity of 350 MW, however after the directives of PPIB Board to decrease the dependency of imported fuels, M/s. Siddiqsons Energy Limited decided to convert imported coal based power project to local Thar coal. Subsequently, the location of the project was changed from Port Qasim, Karachi to Thar Block-II, Sindh. The Project has accepted revised upfront Thar coal tariff by NEPRA.

Salient features of project are as follows:
- Project Company: Siddiqsons Energy Limited
- Sponsors: Siddiqsons Limited, Harbin Electric International Co. Ltd.
- Location: Thar Block-II
- Capacity: 330 MW
- Project Cost: US$ 410.29 million
- Applicable Policy: 2015

Key milestones achieved
- Issuance of LOI: 13.02.2015
- Issuance of LOS: 31.08.2015
- Signing date of PPA: 07.03.2018
- Signing date of IA: 08.03.2018

Current Status:
Company has signed IA and PPA and also executed Water Use Agreement with Government of Sindh. The Project is expected to achieve Financial Closing by 4th Quarter of 2020.
Thar Coal based Power Project at Thar Block-VI by M/s Thar Electricity (Pvt) Limited

This 1,320 MW Mine Mouth Coal Fired project is being developed by Oracle Coalfields PLC, a UK based company and will utilize coal from Thar Block-VI. The project is included in the Priority Projects under the CPEC. The Sponsors submitted their revised proposal on 24th March 2020 pursuant to section 6.3 (v) as a designated project covered under bilateral agreements between GoP and foreign governments. The proposal is presently under evaluation and the NTP/LOI shall be issued after approvals from ECC of the Cabinet and JCC & JEWG of the CPEC.
Implementation of IPPs based on Imported Coal and RLNG
The availability of sufficient electric power generation capacity is necessary to meet the load requirements. After facing a long period of electric power generation shortages, Pakistan has reached a stage where the installed power generation capacity is more than sufficient to the total demand of the country in FY 2019-20. As per NEPRA’s State of Industry Report 2020, from 2016, till June 2020, a total of 13,298 MW electric power generation capacity was added to the power system of Pakistan. Such huge addition of megawatts played vital role in overcoming electricity shortage in the country. Historically, the pattern of electricity production to control the several cycles of electricity shortfalls has kept on changing markedly witnessing several distinct episodes, each characterized by one fuel type dominating the other in the total energy scenario. Last decade exposed energy deficient economy of Pakistan to high prices of furnace oil and depleting gas reserves, stretching further the gap between demand and supply of electricity. To overcome repeated cycles of shortfalls from country forever, three strata energy policy targeting short term, medium term and long term plans was adopted by the GoP which was operationally implemented by PPIB under the Power Generation Policy 2015 especially launched by the GoP to accommodate new fuels in the energy mix such as RLNG and Coal and to facilitate government funded projects under IPP mode for availing incentives, concessions and facilitation of PPIB as being provided to the IPPs in the private sector.

Implementation of IPPs based on Imported Coal and RLNG

The inside out approach adopted by PPIB was focused on boosting the indigenous fuel resources and diversifying the then prevailing energy mix while ensuring reliable and affordable generation of electricity. Thar coal, the abundant and mostly untapped indigenous natural resource lying dormant under the desert sands quickly became priority choice for power generation, however, initial studies and consultation conducted at different fronts suggested extended timelines before the first Thar coal mine and associated power plants could be materialized.

Limited by options and the urgency of the stringent task at hand, short term option of establishing power plants based on imported coal with possibility of blending Thar coal upon its commercial availability was considered viable. The second phase called for promoting Thar coal based power plants fixated in medium to long term plans. Accordingly, before enforcing moratorium on imported coal, PPIB executed the plan and prioritized three imported coal based plants of 1,320 MW each power generation capacity at Port Qasim, Sahiwal and Hub while a 300 MW plant in Gwadar under the game changer China Pakistan Economic Corridor framework was also included in the plan to energize upcoming socio-economic activities going to take place in Gwadar and adjacent areas.

While considering shorter gestation period as compared to indigenous/Thar coal as well as hydropower projects of similar size, imported coal based projects capable of utilizing Thar coal upon its commercial availability were initiated to meet the country’s immediate electricity shortfall and to serve as a reliable base load solution. Furthermore, in order to trade off the anticipated impact on foreign exchange reserves, numbers of hydro and local coal based projects were also prioritized in parallel to cater the electricity requirements with sustainability on long term basis.
As envisioned by the GoP, this initiative rightly served the purpose and as an outcome, three mega imported coal based plants namely Sahiwal, Port Qasim and Hub Power were inducted into the system within the average period of less than 4 years. Progress journey of these mega projects under the efficient and vigorous facilitation by PPIB starting from issuance of LOI to commissioning is illustrated as follows:

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Date of LOI</th>
<th>Date of LOS</th>
<th>Date of FC</th>
<th>Date of COD</th>
<th>Total Time (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sahiwal</td>
<td>21.05.2014</td>
<td>17.04.2015</td>
<td>31.03.2017</td>
<td>28.10.2017</td>
<td>41</td>
</tr>
<tr>
<td>CPHGC</td>
<td>29.06.2015</td>
<td>12.04.2016</td>
<td>26.01.2018</td>
<td>17.08.2019</td>
<td>50</td>
</tr>
<tr>
<td><strong>Average (months)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>46</strong></td>
</tr>
</tbody>
</table>

The fourth and last imported coal based power generation project which was conceived under CPEC is 300 MW Gwadar Project which holds strategic importance for Pakistan due to its location in the port city of Gwadar which is turning out to be a gateway to progress and prosperity of not only Pakistan but the entire region. The establishment of Gwadar Project is crucial to make Gwadar self-sufficient in electricity, as it is currently relying on the 100 MW imported electricity from Iran. It will not only deliver 300 MW to the system but will also be instrumental in flourishing economic activities in Gwadar which features heavily in CPEC and envisages to be a crucial link between the One Belt One Road and Maritime Silk Road Project. After determination of tariff by NEPRA, Letter of Support (LOS) was issued to the Project on 23rd August 2019 after which the project was formally inaugurated on 4th November 2019 in Gwadar. The inauguration ceremony was attended by Senate Chairman Sadiq Sanjrani, senior officials of GoP including Power Division, Planning Division, PPIB and the members of high level Chinese delegation. The project encountered delays on part of tariff determination, land acquisition, signing of PPA, grid interconnection & transmission infrastructure issues which took long time in settling. Such delays were beyond the reasonable control of project company/sponsors. Accordingly, PPIB as facilitator played its due role, and with the combined efforts and support of all concerned stakeholders, such issues were settled amicably and the project was put back on the track of development. However, the COVID-19 challenge is feared to impact on the development of project. Nevertheless, efforts are in progress to evade this natural calamity with little or no damage.

It goes without saying that imported coal plants have proved useful in bringing in the required technology in the country, thus working as a catalyst to develop local coal based projects. Furthermore, they have built the capacity of native human capital of the country for managing Thar coal supply chain and its utilization for power generation in future. The imported coal plants are equipped with super critical technology with state of the art intervention systems, which ensure mitigation of hazardous coal emissions like NOx and SOx while adhering to strict criterion set by World Bank and achieving values much below the local National Environmental Quality Standard.

In addition to imported Coal based Projects, RLNG projects were also conceived for providing relief to the electricity starved system within a quickest possible time frame. In this regard, initially, three mega projects were planned namely, 1,180 MW Bhikki, 1,223 MW Balloki and 1,230 MW Haveli Bahadur Shah, all located closer to the load centers. The Government of Punjab decided to develop 1,180 MW Bhikki Power Project in Bhikki, District Sheikhupura through its own budget and accordingly established Quaid-e-Azam Thermal Power (Pvt) Limited (QATPL) while 1,223 MW Balloki and 1,230 MW Haveli Bahadur Shah Projects were undertaken by the Government of Pakistan through a SPV National Power Parks Management Company Limited (NPPMCL). PPIB processed these federal and provincial government funded projects in IPP mode under the provisions of Power Generation Policy 2015. Later, due to slippages in timelines of some advance stage projects which otherwise were scheduled to come on line during 2017-18 (mainly Neelum Jhelum hydropower project), the GoP decided to launch...
another RLNG based project at the location near Trimmu Barrage, District Jhang to bridge the gap anticipated as a result of such slippages. For this purpose, ban imposed in 2016 for processing new power generation plants on imported fuels was lifted for once as a special case. The 1,263 MW project was funded by the Government of Punjab as well utilizing its own resources and for smoothly managing the whole process, Punjab Thermal Power (Pvt) Limited (PTPL) was incorporated. PPIB was assigned the responsibility of processing this project in IPP mode under the provisions of Power Generation Policy 2015.

For achieving ambitious target set by the GoP for getting maximum megawatts in a shortest timeframe, three RLNG based 1,180 MW Bhikki, 1,230 MW Haveli Bahadur Shah and 1,223 MW Balloki were completed by PPIB through fast track processing with average completion period of 28 months starting from issuance of Letter of Intent (LOI) and materialized 3,633 MW by mid 2018. However, PTPL which is the fourth RLNG based project is facing delays on part of signing project agreements which include (IA, PPA, GSA etc) due to which FC could not be achieved so far. Despite such delays, construction activities are continued in parallel at full pace and so far more than 80% of construction work has been completed. Efforts are being made by PPIB to resolve all pending issues and bring this project online without further delay.

As far as combined contribution of imported coal and RLNG projects in energizing the national grid is concerned, it is evident from the fact that six projects based on Imported Coal and RLNG fuels have started power generation of 7,593 MW within the average time period of around 3 years, hence, PPIB accomplished the task of the GoP for easing the energy situation in a shortest time period.

Ongoing imported coal and RLNG based power generation projects being processed by PPIB is as follows while the status of each is given on the coming pages:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Project Name</th>
<th>Capacity (MW)</th>
<th>Status as on 30.06.2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hub Power Company Project</td>
<td>1,320</td>
<td>Commissioned</td>
</tr>
<tr>
<td>2.</td>
<td>Gwadar Project</td>
<td>300</td>
<td>Under FC</td>
</tr>
<tr>
<td>3.</td>
<td>PTPL Project</td>
<td>1,263</td>
<td>Under FC</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total (Imported Coal)</strong></td>
<td><strong>1,620</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total (RLNG)</strong></td>
<td><strong>1,263</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total (Imported Coal + RLNG)</strong></td>
<td><strong>2,883</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Imported Coal based Power Project at Hub Balochistan by M/s Hub Power Company Limited

This 1320 MW imported coal based power project at Hub Balochistan is amongst the list of ‘Priority Projects’ under China-Pakistan Economic Corridor. HUBCO the main sponsors along with China Power International have planned this project near existing site of 1292 MW HUBCO oil fired power plant. This plant is included in the fleet of 4 x imported coal based power plants committed under the CPEC framework.

Salient features of project are as follows:
> Project Company: China Power Hub Generation Company (Private) Limited
> Sponsors: Hub Power Company Limited, China Power International Holding
> Location: Hub, Baluchistan
> Capacity: 1,320 MW
> Project Cost: US$ 1,912.2 million

Key milestones achieved
| Issuance of LOI | 29.06.2015 |
| Signing of PPA | 25.01.2017 |
| Signing of IA | 25.01.2017 |
| FC Date | 07.12.2017 |
| Commissioning Date | 17.08.2019 |

Current Status:
The 1320 MW imported Coal Power Project has achieved its Commercial Operations Date on 17th August 2019, and it is presently 8th in NTDC’s merit order list. For import of coal, the project company has constructed a dedicated, self-use jetty. This facility includes coal-unloading Jetty, approach bridge, and associated auxiliary facilities and this facility may also be used for other purposes in the future.

300 MW Imported Coal based Power Project at Gwadar Balochistan by M/s China Communication Construction Group

300 MW imported coal based power project is a part of CPEC’s initiative for development and uplifting of coastal areas of Balochistan especially Makran and Gwadar district. This is an important project due to its strategic location and for future development of Gwadar Port and special economic zone. The project is being developed by the sponsor, China Communication Construction Group (CCCC) through its wholly owned subsidiary CCCC Industrial Investment Holding Company Limited (CHCC), which is also the developer of Gwadar Port.

Salient features of project are as follows:
> Project Company: CHC Pak Power Company Limited
> Sponsors: China Communications Construction Group Ltd
> Location: Gwadar, Baluchistan
> Capacity: 300 MW
> Fuel: Imported Coal
> Project Cost: US$ 400 million
> Applicable Policy 2015

Key milestones achieved
| Issuance of LOI | 26.05.2017 |
| Issuance of LOS | 23.08.2019 |
| Ground breaking Date | 04.11.2019 |

Current Status:
After approvals from competent forums including Joint Cooperation Committee (JCC) of CPEC, the Economic Coordination Committee and PPIB Board, LOS was issued on 23rd August 2019. The ground breaking of the project was held in November 2019. While formal on site activities and mobilization of EPC contractor have been initiated. Project is targeted to be completed by last quarter of 2022, however, it is behind the schedule due to factors including land allocation, Interconnection/ Power evacuation facilities from Gwadar by NTDC/ QESCO, concerns over NEPRA’s tariff determination, execution of project agreements, etc. COVID-19 has also affected its progress. PPIB is coordinating with all concerned stakeholders and with the project sponsors for settlement of all pending issues as soon as possible.
Punjab Thermal Power (Private) Limited (PTPL) is a company wholly owned by the Government of Punjab incorporated for development of a 1,263 MW R-LNG based Combined Cycle Power Plant located near Trimmu Barrage on the confluence of two rivers- Jhelum and Chenab and it is the largest R-LNG based power generation project under Power Generation Policy 2015. This is the second R-LNG based power project being developed by the Government of Punjab through its own resources, the first being the 1,180 MW Bhikki Power Plant, which has already entered full-fledged combined cycle commercial operations and has generated over 9.3 billion units during last year.

Salient features of project are as follows:

- **Project Company:** Punjab Thermal Power Limited
- **Sponsors:** Punjab Thermal Power Limited, Owned by Government of Punjab
- **Location:** Near Trimmu Barrage, District Jhang, Punjab
- **Capacity:** 1,263 MW
- **Fuel:** R-LNG
- **Project Cost:** US$ 707.759 million
- **Applicable Policy:** 2015

**Key milestones achieved**

- Issuance of LOI: 26.07.2017
- Issuance of LOS: 26.01.2018
- Signing of PPA: 22.06.2020
- Signing of IA: 26.06.2020

**Current Status:**

The Project is at advanced stage of development, with over 80% of the construction work completed and it is being developed using Siemens’ air-cooled, H Class gas turbines with power plant’s net efficiency of 61.16% at reference site conditions. The 220 kV transmission line for power evacuation has also been completed by NTDC. The Project is in the process of achieving Financial Closing (FC). Upon PTPL’s request, the FC deadline was extended to 24th July 2020 by PPIB Board owing to reasons beyond the reasonable control of the Company. However, due to COVID 19 lockdown adverse implications and non-execution of agreements, certain activities / tasks depending thereupon have not been completed. PTPL has requested further extension in the FC Date for a period of six (6) months, which will be taken up with PPIB Board in its next meeting.
Development of Transmission Network
Incremental development in the generation side necessitates availability of a vibrant and efficient network to transmit electricity over long distances across the country. Transmission network serves as a bridge between electricity generation and distribution sector and a sustainable power sector ensures reliable power supply to the end consumer. There is no doubt that weak and unreliable transmission and distribution system plagued with constraints and bottlenecks has been a major challenge for Pakistan’s power sector since long. Electricity is an integral part of the economic order of Pakistan because energy demand and economic growth share a tight bond. As discussed earlier, Pakistan is overcoming a severe energy crisis and the energy side bottlenecks have corroded the economy of the country in the past as well. To fix such congestions and bottlenecks for the smooth delivery of energy services, massive projects were incorporated to the supply side in between years 2013-20 through which 9,000 MW have been added alone through PPIB as have been discussed in pre-pages:

Although the additional capacity added through PPIB has helped in easing the bottlenecks at generation side, yet the transmission and distribution side congestion and inefficiencies are still hampering the smooth and efficient delivery of energy services. The power generation plants established through IPPs commissioned during 2013-20 and pipeline projects are located all over the country covering areas from Chitral to Gwadar and AJ&K to Tharparkar thus for evacuation and transmission of electricity from these plants to the load centers also require efficient and adequate transmission infrastructure. Locations of recently commissioned and future projects as shown in the below image indicate that country wide transmission network is required to be developed and upgraded to cover long distance areas for efficiently accommodating new generation capacities. Ensuring the adequacy and readiness of the National Transmission System to accommodate new generating capacities is of paramount importance. Historically, in Pakistan, transmission sector has been purely under the government control, and like other developing countries, Pakistan too has been facing funding constraints against substantial needs of upgrading and expanding inadequate and inefficient infrastructure operated with inadequate maintenance capacity as a result of which it suffers from technical and distribution losses. Realizing such limitations against the task in hand which requires massive investments, the GoP planned to induct private sector for development and augmentation of transmission network and announced policy framework titled “Policy Framework for
Private Sector Transmission Line Projects 2015” – (Transmission Line Policy) for facilitation of investors. The Policy features shortened, simplified and well aligned procedures of international standards coupled with a set of concessions and incentives through one window facilitation of PPIB.

The first ever private sector transmission line project which is also the first HVDC project in the energy history of Pakistan was committed by the Private Sector under the Framework of CPEC. The ±660 kV Bipolar Matiari-Lahore HVDC Transmission Line Project is one of the key projects in CPEC which will transmit 4,000 MW of electricity from the new power generation projects located in the southern region of Pakistan. This transmission facility will primarily be utilized to transmit power generated from indigenous Thar coal based power generation projects, thus contributing in enhancing the share of indigenous fuel based generation and saving significant amount of foreign exchange. PPIB is playing vital role in private sector resources mobilization for mega power generation and transmission infrastructure projects, and Matiari-Lahore HVDC transmission project is one such example. Most of the civil works of the Project, along with installation of major equipment have been completed in the Converter Stations and Transmission Line. Material supply for the project has also been nearly completed and the project is scheduled to start Commercial Operations by 1st March 2021. It is anticipated that the project will further pave the way for implementation of future transmission line projects through the private sector. In pursuit of the objectives of Transmission Line Policy, PPIB has been endeavoring to implement transmission line projects and is fully geared up to process such projects through private sector as soon as NTDC recommends a list of doable projects. Brief background and salient features of Matiari-Lahore Transmission Line project are appended at forthcoming.

Current Status:
With consistent efforts of PPIB and support of relevant stakeholders, Financial Close of the project was achieved by the project company on 27th February 2019. The construction activities at the Project site are in full swing since 1st December 2018 and even with the outbreak of Novel Coronavirus epidemic (COVID-19), the Project has achieved substantial overall progress of ~ 86%. Project is all set to be commercially operational by March 2021.
Implementation of CPEC Energy Chapter
The Belt and Road Initiative (BRI) and the China Pakistan Economic Corridor (CPEC) are 21st century models of international cooperation, underpinned by ideals and principles and invested with political commitment and requisite resources, for positive transformation of the regional and global landscape. CPEC is a flagship project of BRI signed in 2013 and launched in 2015. CPEC epitomizes the new priorities in Pakistan-China economic cooperation and encapsulates the essence of understandings at leadership level and agreements made over the past few decades. Chinese investment has made it possible for Pakistan to benefit from China’s economic rise in a substantial manner. CPEC is bound to go transnational and span over other adjoining regions thus enabling Pakistan to realize its geo-economic potential as a conduit for trade, commerce and a transportation hub. Economic and trade cooperation has witnessed a quantum jump with the launching of CPEC, which inter-alia centers on developing infrastructure, energy, agriculture, and industrial development in Pakistan. The development of Gwadar deep sea port holds immense potential for serving as another gateway not only to Pakistan but all of the landlocked states of Central Asia and Afghanistan. Energy cooperation has been extremely helpful in overcoming shortages of electricity. China has also been assisting Pakistan in developing clean coal energy using super critical technology and hydro-electric potential.

Pakistan in developing clean coal energy using super critical technology and hydro-electric potential. With particular reference to the energy chapter, projects based on indigenous Thar coal, renewable hydro and imported coal are being prioritized under two categories which include “Priority Projects” and “Actively Promoted Projects”. According to CPEC agreement signed in November 2014, projects of more than 17,000 MW were planned to be implemented through PPIB and AEDB out of which, currently, PPIB is handling thirteen (13) power generation projects comprising hydro, Thar coal and imported coal and in addition to power generation projects, an HVDC Transmission Line Project.

CPEC POWER PROJECTS - FUEL WISE

- Hydro: 3,428 MW
- Thar Coal: 3,960 MW
- Imported Coal: 4,280 MW

Total = 11,648 MW
Total investment outlay of energy and transmission line projects being processed by PPIB under CPEC is around US$ 21 billion which is a huge investment considering the fact that this has been made in a single sector of Pakistan's economy. The FY-20 was another productive year for CPEC based power generation and transmission line projects, as despite the outbreak of COVID-19 Pandemic, majority of the projects picked momentum in accomplishing various milestones. However, some marginal variations in timelines of advance stage projects are anticipated due to which COD schedule of few projects may be delayed marginally.

Due to fast-track processing by PPIB, the portfolio of 13 power generation and one transmission line projects under CPEC has achieved significant progress within a period of 3-4 years. Accordingly, Coal based energy chapter of CPEC is expected to be concluded by end 2023 while hydropower projects being different in nature and involving more complicated and time consuming activities as compare to traditional thermal power generation projects would go beyond 2023. With all out efforts of PPIB and support of all stakeholders including the Power Division, federal & provincial entities, NEPRA and CPEC Secretariat, four (4) coal based power projects (3 x imported coal based projects of 3,960 MW and 1 x These coal based project of 660MW) totalling 4,620 MW have already been commissioned. In addition to these commissioned IPPs, another nine IPPs are under processing out of which 8 IPPs are at advance stages of development.

These projects are located all over the country including AJ&K. Location wise detail is given in the chart below:

CPEC Power Projects - Location Wise

Total investment outlay of energy and transmission line projects being processed by PPIB under CPEC is around US$ 21 billion which is a huge investment considering the fact that this has been made in a single sector of Pakistan's economy. The FY-20 was another productive year for CPEC based power generation and transmission line projects, as despite the outbreak of COVID-19 Pandemic, majority of the projects picked momentum in accomplishing various milestones. However, some marginal variations in timelines of advance stage projects are anticipated due to which COD schedule of few projects may be delayed marginally.

Due to fast-track processing by PPIB, the portfolio of 13 power generation and one transmission line projects under CPEC has achieved significant progress within a period of 3-4 years. Accordingly, Coal based energy chapter of CPEC is expected to be concluded by end 2023 while hydropower projects being different in nature and involving more complicated and time consuming activities as compare to traditional thermal power generation projects would go beyond 2023. With all out efforts of PPIB and support of all stakeholders including the Power Division, federal & provincial entities, NEPRA and CPEC Secretariat, four (4) coal based power projects (3 x imported coal based projects of 3,960 MW and 1 x These coal based project of 660MW) totalling 4,620 MW have already been commissioned. In addition to these commissioned IPPs, another nine IPPs are under processing out of which 8 IPPs are at advance stages of development.

CPEC has a commendable contribution in overcoming electricity shortages in Pakistan as well as diversifying the country’s fuel-mix. Completion of all CPEC projects will provide Pakistan a number of new corridors of success and economic prosperity in the years to come. The scale of development is increasing under CPEC and it is well on track to provide new avenues of success for Pakistan in the years to come. However, slight variations in the completion schedules of few projects cannot be ruled out in the backdrop of Covid-19 outbreak.
Future Plans and Targets
Future Plans and Targets

Enjoying a laudable past track record, PPIB is committed to maintaining its reputation of providing services to the nation. As a front-line institution of the GoP, PPIB is working efficiently for the development of power sector on solid, reliable, and sustainable footings. PPIB has already put an end to processing new imported fuels based power generation projects for encouraging indigenous Thar coal, and renewable hydro-based power generation projects. The efforts of PPIB have resulted in delivering positive outcomes as the power sector is witnessing a remarkable growth of prioritized fuels and technologies which is a healthy indicator towards attaining reliability and sustainability in the system. The increasing share of indigenous coal and hydro has reduced the oil percentage to 17% of the energy history of Pakistan and it is further declining with the gradual commissioning of new IPPs on indigenous fuels.

For fulfilling long-term power requirements, the GoP has increased focus on cost-effective generation options and use of domestic resources, particularly hydro potential in the north, renewable wind and solar in south and local coal mostly available in Thar area. Creating an ideal balance amongst various choices which are affordable within a sustainable socio-economic framework for the country would form a solid base towards attaining long-term sustainability and reliability in the sector. PPIB is devoted to implement the reform agenda of the GoP for developing a power sector that is efficient and profitable sector under the Indicative Generation Capacity Expansion Plan (IGCEP) which will be revised every year on the basis of ground realities including growth trajectory, consumption patterns, or delays in projects to ensure regulatory compliance. The IGCEP specifies various generation requirements, fuel choices, technologies, plant sizes, timing of their addition into the system, and in many cases, their location as well. The plan will continue to focus on least cost generation options and harnessing indigenous resources, particularly Thar coal and renewable in south and hydro potential in the north.

There are various important bipartite and tripartite activities involved in processing a power generation project such as tariff determination, land acquisition, generation license, environmental clearance, IA, PPA, WUA, CSA, TSA, FSA etc. which are interdependent on each other and if any cycle of activities is disrupted by any single activity, it impacts the overall chain, thus disturbing the project timelines. Therefore, for ensuring smooth processing of projects, well-coordinated efforts amongst all relevant stakeholders as well as Project Sponsors play a critical role. PPIB has always been determined in timely execution of all activities by maintaining close liaison with relevant stakeholders as well as other federal and provincial levels key players. Since upcoming projects are at advanced stages of development, hence require added attention for accomplishing critical milestones. Accordingly, for future, PPIB would continue to be focusing on efficient handling of the portfolio of projects in the backdrop of prevailing COVID-19 challenge. In this regard, PPIB’s immediate target would be to complete eleven (11) IPPs of more than 5000 MW mostly based on Thar coal and hydro during the period 2020-2022.

Fuel wise portfolio of ongoing power generation being handled by PPIB vis-à-vis targets set for accomplishing various tasks related to projects development are elaborated hereunder.

Hydropower Generation

Apart from being comparatively longer gestation periods, hydropower being a clean source of electricity with other allied advantages, remains on the favourite list, worldwide, hence, it is all time favourite choice of the policy makers. Beside direct advantage of generating electricity, development of a hydropower project brings several indirect benefits which include but not limited to creation of employment opportunities, development of allied infrastructure and industry, boosting agriculture industry through smooth supply of electricity and water, flourishing tourism activities in the area, initiation of community welfare programs under Corporate Social Responsibility (CSR). However, hydropower generation is dependent upon the hydrology which varies on seasonal basis. Further the remote location of hydropower plants, higher construction cost, longer transmission lines etc. are the potential challenges in development of hydropower projects in Pakistan. As discussed in detail earlier, currently PPIB is processing a portfolio of fourteen (14) hydro IPPs of 6,175 MW which are at different stages of implementation, some are at LOS stage while various IPPs are at post LOS, FC, and construction stages. Similarly, there are few projects which are being planned to be awarded through ICB process under the Power Generation Policy 2015 and subject to the roadmap of IGCEP.
Current status as well as future targets/plans of PPIB for implementing hydropower projects is appended in the following image:

In order to optimize hydropower generation in the country, Private Power and Infrastructure Board is planning to invite Expressions of Interest through International Competitive Bidding from prospective investors for development, financing, construction and operations of following hydropower projects in the private sector. These projects will be offered to potential investors in accordance with the relevant provisions of applicable Policies subject to verification of demand supply situation by the Government which is being carried out on annual basis under IGEC framework:

a) 548 MW Kaigah Hydropower Project - Proposed to be developed on Indus River, Khyber Pakhtunkhwa
b) 500 MW Chakothi-Hattian Hydropower Project - Proposed to be developed on Jhelum River, Hattian, AJ&K.
c) 132 MW Rajdhani Hydropower Project - Proposed to be developed on Poonch River, AJ&K
d) 80 MW Neckherdim-Paur Hydropower Project - Proposed to be developed on Yarkun River, Chitral Valley, KP

For maximizing hydropower generation, PPIB has been assigned another important task of implementing Small Hydropower Projects (SHPs) being indigenous, renewable and economical resource up to the capacity of 50 MW. The Board of PPIB in its 122nd meeting held on 19th February 2019 approved processing of SHPPs initiated by the Provincial / AJ&K governments for issuance of Tripartite LOS (TLOS) under the Power Policy 2015. It was inter-alia decided by the Board that small hydropower projects already initiated by provinces / AJ&K will be further processed under 2015 Policy and the TLOS will be issued by PPIB after fulfilment of pre-requisites as per 2015 Policy and achievement of three major milestones; including tariff determination / approval by NEPRA (in case the same is more than one year old, a fresh tariff from NEPRA would be required), NOC for power evacuation and grid interconnection from NTDC and / or relevant DISCO, and CPPAG-L’s consent for purchase of power. In this regard, Board of PPIB in its 123rd meeting held on 6th May 2019 approved issuance of TLOS to initially following two SHPPs which fulfill the above criteria:

- 7.08 MW Riali-II Hydropower Project located on Ghori Wala Nullah, Muzaffarabad AJ&K
- 8 MW Katahi-II Hydropower Project located on Kathai Nullah, Hattian, AJ&K Kathai Project
Private Power and Infrastructure Board

In accordance with the decision of the Board, PPIB issued TLOS to 7.08 MW Riali SHPP on 16th October 2019 and 8 MW Kathai on 20th November 2019. Both projects are progressing for achievement of Financial Close for which PPIB is facilitating sponsors of these projects. Furthermore, there are several other SHPPs which are in the process for issuing TLOS by PPIB and soon PPIB would undertake more SHPPs under Power Generation Policy 2015 for processing.

This initiative will attract and encourage potential investors in developing small to medium size hydropower projects in the country particularly in Az&K, GB and Punjab which will further augment clean, green and cheap generation capabilities in the country. This will also enhance the confidence of investors in investing in indigenous/renewable hydropower Projects of country.

Increased Prioritization of Thar Coal for Power Generation

The present portfolio of Thar coal based power generation projects comprises of seven projects of 4,950 MW which are at different stages of development. The generation capacities of these projects range between medium size of 330 MW to mega size of 1,320 MW which are planned to be completed during 2019-2023. Currently, majority of these projects are at advance to very advance/final stages of development while there is only one project which is at initial stage of processing, whereas rest of the projects are at post LOS stages; some are about to achieve FC while few other are under construction. Similarly, 660 MW Thar coal based Engro Power has already been commissioned and supplying electricity. The biggest challenge before PPIB would be to ensure smooth and speedy implementation of upcoming projects with minimum impact of COVID-19 on their timelines. Current status of Thar coal based Power projects is appended in the following image:

Completion of Ongoing Projects based on Imported Coal and RLNG

PPIB in line with the policy of the GoP, is already operating with least focus on imported fuels for power generation and processing only those projects which were conceived earlier to the said policy for honouring contractual obligations. Currently, PPIB is processing only one RLNG based project of 1,263 MW located in Jhang and one imported coal based project of 300 MW located in Gwadar. Both these projects are at advance stages of implementation. The RLNG based project is under construction while coal project is under Financial Closing.

It is imperative to highlight that although the imported coal based power generation projects which have been commissioned and those which will be commissioned in near future also have the capability of blending some portion of Thar coal upon its availability on commercial basis. Current status of imported fuels based (RLNG & Coal) Power projects is appended in the following image:
As discussed in the previous chapters, PPIB is actively processing the ±660 kV Matiari-Lahore HVDC Transmission Line Project which is likely to be completed within stipulated timeline of March 2021. With the support of relevant stakeholders, all out efforts are being made by PPIB to make this project operational concurrently with those power projects which are planned to be connected with this project.

With the GoP’s enhanced focus on energy security for reliable access to energy resources at affordable economic, financial, environmental and social cost; concerted efforts for private sector resource mobilization are necessary for large infrastructure projects. Considering the large capacity additions planned in electrical generation system, the GoP / PPIB are poised to materialize plans for establishment of new EHV transmission line projects through conduct of first International Competitive Bidding (ICB), pursuant to provisions of the TL Policy 2015.

In this respect, the Planning Commission, Ministry of Planning, Development & Reform had earlier communicated Minutes of Central Development Working Party (CDWP)’s meeting held on 24th May 2018, wherein the CDWP inter alia constituted a Steering Committee comprising members from Planning Commission, Ministry of Energy (Power Division), NTDC & PPIB for identification of list of transmission line projects and for overseeing preparation of the security package to conduct ICB. So far nine (09) meetings of the Steering Committee have been held on the matter.

Since it would be the first ever Levelized Tariff based ICB for award of transmission line project(s) to private sector, preparation of standardized Request for Proposal (RFP) along with a bankable set of Security Package Documents (SPDs) including Implementation Agreement (IA), Transmission Services Agreement (TSA), Operation & Maintenance Agreement (O&M), Land Lease and Right of Way Agreement (LRA) as required for such transactions, are of utmost importance. The Terms of Reference (TORs) of the Steering Committee also include inter-alia seeking donor’s assistance. Therefore, on the request of PPIB, the Steering Committee initiated exploring the possibility of International Donor’s assistance such as World Bank and USAID, for the whole exercise leading up to the conduct of ICB and award of project(s) to the successful bidder(s).

The matter was therefore presented in 125th Meeting of PPIB Board held on 29th August 2019 wherein PPIB Board’s approval / permission was sought regarding finalization of TORs (in consultation with Planning Commission, NTDC & USAID/SEP) for engagement of Consultant Firm by USAID/SEP for the initiative, signing of Task Sustainability Plan (TSP) along with NTDC for acquiring USAID/SEP assistance, and processing of the two candidate projects as recommended by NTDC and approved by the Steering Committee however the Board did not agree to the proposed technical/financial support by USAID/SEP for the said initiative.

In the meanwhile, International Finance Corporation (IFC), a member of World Bank Group, approached, Planning Commission and PPIB to offer transaction advisory services for conduct of ICB. The IFC also discussed collaboration with USAID/SEP for accomplishment of the desired objective of implementing transmission line projects through private sector through ICB under the TL Policy 2015 during a meeting held on 30th September 2019 at Planning Commission which was participated by IFC, USAID, SEP, PPIB and Planning Commission. In light of protracted discussions held during meeting at Planning Commission, the USAID shared a revised TSP including roles of USAID/SEP, IFC, PPIB, and NTDC & Planning Commission.
MPCL in June 2018 submitted a request for issuance of LOI for setting up a 180 MW CC Power Project in Phase-I using available and unallocated 66 MMCFD Low BTU Gas from Goru-B Reservoir of Mari Gas field while 100 MW to be installed as and when the 44 MMSCFD of gas becomes available. PPIB advised MPCL to provide consents from CPPA-G (on proposed plant size, technology, fuel, location & commitment for power procurement), NTDCL (for arrangement of power evacuation & power dispersal facilities) and Petroleum Division (on allocation of gas for the term of the Project). Accordingly, MPCL requested CPPA-G, NTDCL and Petroleum Division’s consents/approvals for the Project.

PPIB Board in its 125th meeting held on 29th August 2019 approved allocation of 44 MMCFD gas, available from Mari gas field after vacation of interim order by Sindh High Court, to Mari Petroleum Company Limited (MPCL). Regarding 66 MMCFD additional Mari Deep Gas approved by the ECC for power generation, the Board recommended to Power Division to allocate it to MPCL, considering the first right of refusal clause-6.3(ii) of the Power Generation Policy 2015, for developing a new power project based on combined 110 MMCFD gas. However, the power project shall be processed by PPIB after issuance of consents by CPPA-G for power procurement and NTDCL for power evacuation and in conformity with the requirements and timelines etc. of the approved Generation Capacity Expansion Plan.

(II) 20 MW CCPP Proposed by Pakistan Petroleum Limited

**Brief introduction:**
- **Project Name:** 20 MW CCPP by Pakistan Petroleum Limited
- **Project Company:** Pakistan Petroleum Ltd.
- **Location:** Near Shahdadpur, District Sanghar, Sindh
- **Capacity:** 20 MW (Gross)
- **Technology:** Combined Cycle Gas Turbines (CCGT)

Ms. Pakistan Petroleum Limited (PPL) had placed a request with PPIB to register its proposed 20 MW CCPP as an IPP project based on non-pipeline quality gas from Hatim X-1 and Faiz X-1 discoveries in Cambat, District Sanghar, Sindh (the Proposed Project), and the company was informed that the processing of the proposed project would be considered after submission of consents / NOCs from CPPA-G, NTDCL and MoP&NR (now Petroleum Division – Ministry of Energy).

DG Gas conveyed the "no objection" of MoP&NR to PPL for exercising its first right of refusal to set up its own IPP based on supply of low BTU gas from Hatim X-1 & Faiz X-1 discoveries in Cambat, District Sanghar, Sindh (the Proposed Project), and the company was informed that the processing of the proposed project would be considered after submission of consents / NOCs from CPPA-G, NTDCL and MoP&NR (now Petroleum Division – Ministry of Energy).

Having extended list of success stories on its credit, PPIB enjoys a unique status among other stakeholders. Starting from implementing IPPs program in 1994, 2002 and 2015, efficient handling of gigantic CPEC energy chapter, delivery of first two hydro IPPs and first Thar coal based IPP, long list of upcoming indigenous coal and hydro based projects, processing first ever private transmission line project and also Small Hydropower Projects are some of the iconic highlights of PPIB’s excellent track record. PPIB being one of the key departments of the GoP in the Power Sector would be playing a crucial role of Independent Auction Administrator (IAA) under the CTBCM Model. PPIB as an IAA will be responsible to provide support to DISCOs in procurement of new capacity on competitive terms through auctions as per provisions of the applicable procurement regulations. PPIB will also be responsible for Procurement Planning for DISCOs based on new capacity additions requirement for the system as worked out in the ICCEP. Further in case a DISCO is not credit worthy to provide the credit cover, the IAA will provide support in form of arranging guarantees and it will also provide security cover against financially weak DISCOs.

### Competitive Trading Bilateral Contract

**Market and PPIB’s Role as IAA**

In perspective of fundamental shift in the entire power system model in the country to make it operationally and financially viable, GoP is planning to implement Competitive Trading Bilateral Contract Market (CTBCM) which basically aims at transition of existing market from single buyer model to a competitive wholesale power market. The objectives of CTBCM include;

- Create the conditions for a fair allocation of risk and benefit sharing between investors/sellers and buyers/consumers
- Level the playing field removing conflict of interest to facilitate entry of new investors and participation of private players, including Bulk Power Customers
- Create the conditions to attract investments based on credit cover provided by market participants, without the need of the government providing sovereign guarantees
- Pressure on the payment discipline
- Improve efficiency arising from competition for the market (new capacity procurement) and in the market (optimization through centralized economic dispatch within system security constraints, to maximize the economic benefits of available resources and promote efficiency)
- Enhance power sector security of supply, generation adequacy, to develop power sector sustainability in the short, medium and long term
- Ensure accountability of all Participants and Service Providers
- Ensure transparency and predictability
- Open access to information

Having extended list of success stories on its credit, PPIB enjoys a unique status among other stakeholders. Starting from implementing IPPs program in 1994, 2002 and 2015, efficient handling of gigantic CPEC energy chapter, delivery of first two hydro IPPs and first Thar coal based IPP, long list of upcoming indigenous coal and hydro based projects, processing first ever private transmission line project and also Small Hydropower Projects are some of the iconic highlights of PPIB’s excellent track record. PPIB being one of the key departments of the GoP in the Power Sector would be playing a crucial role of Independent Auction Administrator (IAA) under the CTBCM Model. PPIB as an IAA will be responsible to provide support to DISCOs in procurement of new capacity on competitive terms through auctions as per provisions of the applicable procurement regulations. PPIB will also be responsible for Procurement Planning for DISCOs based on new capacity additions requirement for the system as worked out in the ICCEP. Further in case a DISCO is not credit worthy to provide the credit cover, the IAA will provide support in form of arranging guarantees and it will also provide security cover against financially weak DISCOs.
Indicative Generation Capacity Expansion Plan

For the first time in the energy history of Pakistan comprehensive planning is being carried out on yearly basis in the form of Indicative Generation Capacity Expansion Plan (IGCEP), which includes expansion planning studies that will be updated annually in order to retain accuracy in the wake of changing dynamics. The aim of the IGCEP is to optimize energy generation costs in order to ensure that adequate generation is added at a least-cost basis to meet future energy demands. PPIB would continue to provide its support in the form of relevant data provision related to its future projects for preparation/finalization of IGCEP.

National Electricity Policy

GoP is actively working on development of an efficient, sustainable, secure, affordable, competitive and environment friendly power system and promoting indigenization of energy resources and technologies. In this regard, National Electricity Policy is being formulated with the consultation of all concerned provincial and federal stakeholders. PPIB is actively involved in the process and providing inputs for making it a comprehensive framework. Since, the policy is expected to be launched in 2020/21, PPIB would continue facilitating the GoP by providing requisite data. Furthermore, after launching the same, PPIB, being well experienced one-window facilitator is ready to exert best efforts to implement it in true spirit for achieving the ultimate goal.
Corporate Brilliance
Human Resource at PPIB

Human Resource Management is a leading support function of any organization. HR at PPIB is one of the most important strategic partners in overall operations, and is fully involved in people management and with their relationships within the organization. It has played a prominent role in achieving the organization’s strategic plans and objectives during the FY 2019-20, through good HR practices.

Recruitment, Selection and Retention

At PPIB, policies for recruitment, selection and retention was successfully handled and employees were provided the environment to progress further for taking more responsibilities at senior level. Employees have been given competitive market based salary, benefits and rewards to retain the brain drain resultantly the employees turnover at PPIB in 2019-20 was 0%.

Human resource policies and procedures were rationalized to make them more efficient which include clearer and fair performance appraisal plans and reward systems.

Capacity Building of Workforce

Employees Development and Knowledge Management is one of the major priorities of PPIB. With the mechanism of training need assessment and feedbacks from employees, annual training plan is prepared every year for capacity building of PPIB employees in technical fields as well as in Management, HR, IT, Finance and Legal.

PPIB arranged seven foreign trainings/workshops during financial year 2019-20. Moreover, 24 professionals and support staff were sent on local trainings in different fields till March 2020, thereafter due to the outbreak of COVID-19 pandemic the trainings could not be held as local and international training institutes halted their training programs.

Clean Green Pakistan (CGP) Movement

The Prime Minister of Pakistan launched CGP Movement in July 2019 with the vision to create a positive image of the country. Ministry of Climate Change was the focal Ministry for the CGP Movement responsible for implementation of its five components namely:

i) Tree plantation
ii) Solid Waste Management
iii) Liquid Waste Management
iv) Total sanitation/hygiene, and
v) Clean drinking water

PPIB was given the task of tree plantation.

Managing Director PPIB inaugurated the tree plantation ceremony on October 23, 2019 which was attended by senior executives of PPIB. PPIB in collaboration with Metropolitan Corporation Islamabad (MCI) planted 100 plants of Jacaranda, Sukh Chain, Chinnar, Plum and Peach at G-8/1, Agha Shahi Avenue, Islamabad.
Event Management

During the financial year 2019-20, number of foreign delegations visited Pakistan for exploring investment opportunities in the power sector of Pakistan. PPIB successfully managed the following events, looked after all logistic arrangements and arranged meetings of PPIB and GoP officials with the delegates.

i. 6th Meeting of Energy Planning Expert Panel of CPEC held on 15-16 October 2019, at Margala Hotel, Islamabad.

ii. 7th Meeting of Joint Energy Working Group (JEWG) of CPEC held on 18 October 2019 at Marriott Hotel, Islamabad.

iii. Meeting of Pak-Turk 6th High Level Strategic Cooperation Council (HLSCC) Joint Working Group on Energy held on 13-14 February 2020 at Serena Hotel Islamabad.

PPIB acted smartly during the outbreak of COVID-19 pandemic which started penetrating in Pakistan from March 2020. Advisories for prevention and containment of COVID-19 were issued and necessary precautionary measures were taken to reduce the risk of exposure to COVID-19. Some of the major steps taken by PPIB in this regard were:

- Ensure safety, maintaining social distancing and other required safety measures, including but not limited to wearing surgical face masks, sanitizing/washing hands etc.
- Most of the operations managed through “Work from Home Mode” by using Virtual Private Network (VPN) and PPIB Official WhatsApp Group for all employees other than the essential employees required to be present in the office. Core employees were called on “rotation” basis through the week.
- All official meetings were conducted through video conferencing.
- Essential employees were facilitated, who were required to work in the office, by providing official transport facility, etc.
- Healthcare facilities related to COVID-19 were allowed to the employees and their dependents free of cost including laboratory tests.
- Strictly followed the SOPs issued by the Federal Government.
- Periodic disinfection of PPIB offices were carried out.
Technical Assistance to PPIB by Agence Française De Développement (AFD)

AFD is providing grant of 500,000 euro through the GoP to support PPIB in Preparation of Mechanism for Tariff based Bidding for Hydropower Power Projects, hiring of Consultant to assist POE on review of Feasibility Studies for Hydropower Projects and capacity building of PPIB employees. The technical, managerial and administrative staff of PPIB shall benefit from it in matters related to management, operation and maintenance of hydropower projects.

PPIB through its HR Section coordinated with AFD to finalize Project and Financing Agreements which were finally signed in February 2020 between AFD & PPIB (Project Agreement) and AFD & EAD (Financing Agreement).

Ergonomics

A healthy workplace environment is ideal when it comes to maintaining a positive outcome in a stressful atmosphere. It puts positive impact on employee motivation, happiness and efficiency. A healthy workplace environment improves productivity and reduces costs related to absenteeism, turnover and medical claims.

Earlier, the PPIB offices were situated on two floors of the Emigration Tower building making the space congested and overcrowded. PPIB acquired additional hall at first floor of the building in September 2019 and after some renovation, HR, Corporate Affairs and Transmission Line Sections were shifted to 1st Floor in November 2019 resulting in a better work environment and employee motivation.

Sports / Health

Physical and mental fitness of employees is extremely important for individual health and organizational productivity. Exercise stimulates the body to produce hormones that give a sense of happiness, excitement, pleasure and comfort. PPIB encourages its employees to participate in sports activities and in this regard a separate budget is allocated every year. PPIB cricket team often participates in cricket tournaments and also plays friendly cricket matches during the season. Even during 2019-20, the cricket team of PPIB played matches and proved its mettle.

Media and Public Relations

For circulating the laurels mentioned throughout this Annual Report, current activities and future plans & targets of PPIB, promotional news releases / articles were published during 2019-20 which proved to be a valuable information source for investors, researchers, academia and for the general public interested in the power sector of Pakistan.

PPIB always enjoyed healthy relations with the media and provided information related to power sector promptly as and when requested. The positive image of PPIB was projected extensively during 2019-20, as a result, negative reporting was reduced to almost zero.

Five (5) meetings of the Board of PPIB (124-128) were held under the Honourable Minister for Power during the said period wherein critical decisions were taken for smooth functioning of PPIB as well as implementation of ongoing power generation projects. Furthermore, several accomplishments and honours were won by PPIB during implementation process of various power generation projects during 2019-20.

These events and activities were covered through official media teams of GoP which include PTV, PID and APP which were arranged by PPIB and widely circulated using different communication tools such as press releases, video footages, articles, advertisements, brochures, briefs etc. Press releases were issued in English with Urdu translation and with photographs were disseminated to print and electronic media across the country while same were also posted prominently at PPIB’s website for catching eyes around the globe. Likewise, ample coverage was given in the news bulletins while TV tickers were flashed on sereens as well.

The masses were given awareness about the power sector by PPIB and informed about the latest and updated status on the development of power generation projects not only through traditional media but also through utilizing on PPIB’s website.
The 2019-20 COVID-19 pandemic has been a major challenge for the world. All types of companies suffered financially and economically and the businesses were practically halted. Information Communication Technology (ICT) proved a major savior at such difficult times throughout the world; PPIB being no exception. During the COVID-19 pandemic, all important meetings and events at PPIB were conducted online using best available cloud based streaming and storage techniques. ICT at PPIB acted like a bridge between PPIB and outer world and provided state of the art connectivity.

Another challenge during the COVID-19 Pandemic was providing online IT support which includes troubleshooting different IT related issues online, and uninterrupted availability of data and workflow. PPIB did this successfully and made sure the physical availability of at least one IT personnel at premises throughout the pandemic. By using Zoom online meeting solution, announced by the GoP dozens of meetings were successfully conducted.

Immediate action was taken as soon as the lockdown was announced by the GoP by making available the daily correspondence online through DSS via VPN and uninterrupted workflow of letters was also made possible.

Talking of search ranking through the web, the first launching pad at PPIB for Pakistan where PPIB’s website is amongst the top 10 results. In order to capture the first clicks, the PPIB’s website is updated on regular intervals with information related to power projects and other interests of the investors.

PPIB publishes all important events through PPIB website for information dissemination to the stake holders, and the masses at large. Like always, during 2019-20 as well PPIB conducted all major events through state of the art IT facilitation.

Power Generation Processes Timelines were published and communicated to stake holders through website for their ease and transparency.

In current era, data and information are main assets of any organization. Realizing the sensitivity of this issue, hardware firewall was installed at PPIB data center for protection of server machines and to minimize the email spam issues for business continuity, without any interference from outside elements.
Pictorial View of Important Events
During 2019-20 the Chief Executive of PPIB i.e. Managing Director kept engaged in dealing with official commitments relating to processing of power generation and transmission line projects, high level briefings, meetings with various dignitaries/ diplomats including the ambassadors of various embassies and key players of the power sector etc. These include but not limited to briefings to the Minister for Power / Chairman PPIB, other ministers, real time and zoom meetings with various national and international organizations which include USAID, World Bank, Asian Development Bank (ADB), SAARC, SDPI, CPPA-G, NEPRA, WAPDA, AEDB, SIEMENS and NUST etc. Meeting were also held with various international consultants for development of hydropower projects and for implementation of CTBCM. The Managing Director has been involved in consultative meetings for formulation of various policies which include ARE Policy and National Electricity Policy. During 2019-20, Managing Director participated various ceremonies related to projects development, which include River Closure, signing of project agreements, inaugurations and Financial Closures etc. Meetings of various Parliamentary Committees, Standing Committees, ECC, CCoE, CCI, CCoCPEC, Prime Minister’s Secretariat, DAC, PAC and its sub committees, power related departments of federal and provincial level, Gilgit-Baltistan and AJK were also attended by the Managing Director from time to time. Since PPIB is processing major chunk of CPEC Energy chapter, therefore, he was actively involved in different consultative and decision making forums which include JCC, JEWG, EPEP. Managing Director PPIB is also the member of the Board of two important departments of the GoP namely the NTDC and NPPMCL and participated in different Board meetings and Sub Committee meetings of the Board of these organizations during 2019-20. Similarly, five meetings of the Board of PPIB were held during Financial Year 2019-20 and various meetings of the Sub Committee of the Board which include Audit and Finance Committee and the Human Resource Committee were held which were actively participated by the Managing Director, PPIB. Pictorial view of some of important events of 2019-20 is as given below.
Private Power and Infrastructure Board

**Signing of TLOS of Riali-II SHPP 20.11.2019**

**Inauguration Ceremony of 300 MW Gwadar Coal Project – 04.11.2019**

**Signing of TLOS of Kathai-II SHPP - 16.10.2019**

Amendment in Working Capital Direct Agreement of HUBCO - 22.08.19

Hi-Tea Hosted by MD PPIB 12.07.2019

Observance of Kashmir Solidarity Day – 30.08.2019
Since its inception PPIB follows a standard practice to have annual accounts audited by renowned accountant firms. The accountancy firm category “A” is selected from the panel of State Bank of Pakistan and thereafter appointed on approval of the Board of PPIB. The accountancy firm is changed after every three years.

The accounts for the period 2019-20 have been audited by Riaz Ahmed and Company, Chartered Accountants are placed at Appendix-II. The auditors have issued an un-qualified report.
COMMISSIONED & UP-COMING IPPs IN PAKISTAN

List of Projects

Commissioned IPPs – Hydro
1. 584 MW Now Trace
2. 147 MW Kainth
3. 320 MW Ennore

Commissioned IPPs – Gas
4. 12 MW Almar
5. 127 MW Rasul Killarwala
6. 146 MW Kirthar
7. 225 MW Thir Liberty
8. 150 MW Gok
9. 354 MW Gok
10. 125 MW Dera Bugti
11. 83 MW Moulsi
12. 86 MW Nako
13. 227 MW Karim
14. 232 MW Khyber
15. 230 MW Diverse
16. 232 MW Sindh Express
17. 125 MW Zar Darya
18. 227 MW Kohat

Commissioned IPPs – Solar
19. 100 MW Hub
20. 562 MW Solar
21. 125 MW Balochistan Solar
22. 100 MW Eat More Solar
23. 125 MW Bannu Solar
24. 125 MW Balochistan Solar
25. 125 MW Sindh Solar
26. 225 MW Southern Electric
27. 125 MW Tapi
28. 125 MW Bhajpur
29. 225 MW Mekai
30. 225 MW Leepa
31. 225 MW Baluchistan Charara
32. 225 MW Dera Bugti Solar
33. 225 MW Hub Solar

Commissioned IPPs – Imported Coal
34. 125 MW Chenab
35. 125 MW Khyber
36. 125 MW Hub
Financial Statements
For The Year Ended
30 June 2020

PRIVATE POWER AND INFRASTRUCTURE BOARD
(PPIB)

FINANCIAL STATEMENTS
FOR THE YEAR ENDED

30 JUNE 2020
Independent Auditor's Report to the Board Members of Private Power and Infrastructure Board

Opinion
We have audited the financial statements of Private Power and Infrastructure Board (PPIB), which comprise the statement of financial position as at 30 June 2020, and income and expenditure statement, the statement of comprehensive income, statement of changes in fund and reserve and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the PPIB as at 30 June 2020, and its financial performance and its cash flows for the year then ended in accordance with approved accounting standards as applicable in Pakistan.

Basis for Opinion
We conducted our audit in accordance with International Standards on Auditing (ISAs) as applicable in Pakistan. Our responsibilities under those standards are further described in the Auditor’s Responsibilities for the Audit of the Financial Statements section of our report. We are independent of PPIB in accordance with the International Ethics Standards Board for Accountants’ Code of Ethics for Professional Accountants as adopted by the Institute of Chartered Accountants of Pakistan (the Code) and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information Other than the Financial Statements and Auditor’s Report Thereon
Management is responsible for the other information. The other information comprises the information included in the director’s report, but does not include the financial statements of PPIB and our auditor’s report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements
Management is responsible for the preparation and fair presentation of the financial statements in accordance with the approved accounting standards as applicable in Pakistan, and for such internal control as the Board determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board is responsible for assessing the PPIB’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the PPIB or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the PPIB’s financial reporting process.

Auditor’s Responsibilities for the Audit of the Financial Statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs as applicable in Pakistan will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit judgment professional in accordance with ISAs as applicable in Pakistan, we exercise and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Used and the reasonableness of
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the PPIB’s internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management’s use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the PPIB’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor’s report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor’s report. However, future events or conditions may cause the PPIB to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

The engagement partner on the audit resulting in this independent auditor’s report is Raheel Arshad.

RIAZ AHMAD & COMPANY
Chartered Accountants
ISLAMABAD
Date: 04 Jan 2021
Private Power and Infrastructure Board
Statement of Financial Position
As At 30 June 2020

<table>
<thead>
<tr>
<th>NOTE</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Rupees in thousand)</td>
<td></td>
</tr>
</tbody>
</table>

**NON-CURRENT ASSETS**
- Property and equipment: 53,474, 50,704
- Intangible assets: 959, 1,158
- Long term investments: 90,066, 85,034
- Loans and advances: 38,846, 30,319
- Deferred income tax asset: 10,370, 3,545

**CURRENT ASSETS**
- Advances, prepayments and other receivables: 105,637, 97,270
- Advance tax: 1,765, 5,415
- Short term investments: 1,698,883, 1,740,897
- Cash and bank balances: 146,703, 103,672

**CURRENT LIABILITIES**
- Provision against performance guarantees encashed: 846,231, 828,466
- Staff benefits: 63,934, 75,797
- Accrued and other liabilities: 94,162, 67,351

**NET ASSETS**
- 1,342,377, 1,164,401

**REPRESENTED BY:**
- PPIB Fund: 1,300,919, 1,125,042
- Investments revaluation reserve: 41,467, 30,759

**CONTINGENCIES AND COMMITMENTS**
- 1,342,377, 1,164,401

The annexed notes form an integral part of these financial statements.

MANAGING DIRECTOR

BOARD MEMBER

---

Private Power and Infrastructure Board
Income and Expenditure Statement
For The Year Ended 30 June 2020

<table>
<thead>
<tr>
<th>NOTE</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Rupees in thousand)</td>
<td></td>
</tr>
</tbody>
</table>

**INCOME**
- Income from operations: 603,066, 499,683
- Income from financial assets: 149,951, 224,415
- Other Income: 650, 2,430

**EXPENDITURE**
- Salaries and benefits: 495,738, 479,327
- Repair and maintenance: 6,193, 6,130
- Printing and stationery: 2,498, 2,063
- Professional and legal services fee: 4,624, 3,421
- Board meeting expenses: 1,892, 2,540
- Traveling expenses: 2,262, 7,720
- Office / ground rent: 41,930, 27,936
- Telephone, fax, postage and courier: 1,799, 1,760
- Fixed assets insurance: 1,094, 1,071
- Utilities: 7,005, 5,650
- Audit fee: 821, 693
- Depreciation: 7,681, 11,328
- Amortization: 199, 199
- Finance cost: 2,929, 2,754
- Advertisement expenses: 603, 1,709
- Other expenses: 6,481, 6,999

**PROFIT BEFORE TAXATION**
- 170,458, 165,218

**Taxation**
- (5,070), (55,640)

**PROFIT AFTER TAXATION**
- 165,388, 109,578

The annexed notes form an integral part of these financial statements.

MANAGING DIRECTOR

BOARD MEMBER
Private Power And Infrastructure Board
Statement of Comprehensive Income
For The Year Ended 30 June 2020

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROFIT AFTER TAX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER COMPREHENSIVE INCOME / (LOSS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items that will be subsequently reclassified to income and expenditure</td>
<td>2,969 (22,103)</td>
<td>284 (21,819)</td>
</tr>
<tr>
<td>Deferred income tax</td>
<td>2,198</td>
<td>21,619</td>
</tr>
<tr>
<td>Items that will not be subsequently reclassified to income and expenditure</td>
<td>14,761</td>
<td>9,784</td>
</tr>
<tr>
<td>Remeasurement of defined benefit plan</td>
<td>4,783</td>
<td>2,837</td>
</tr>
<tr>
<td>Deferred income tax</td>
<td>10,189</td>
<td>6,947</td>
</tr>
<tr>
<td>Other comprehensive income / (loss) - net of tax</td>
<td>12,538</td>
<td>(14,872)</td>
</tr>
<tr>
<td>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</td>
<td>177,075</td>
<td>95,790</td>
</tr>
</tbody>
</table>

The annexed notes form an integral part of these financial statements.

MANAGING DIRECTOR

BOARD MEMBER

Private Power and Infrastructure Board
Statement of Changes in Fund and Reserve
For The Year Ended 30 June 2020

<table>
<thead>
<tr>
<th></th>
<th>PPIB fund</th>
<th>Investments revaluation reserve</th>
<th>Total (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 30 June 2018</td>
<td>1,008,517</td>
<td>61,178</td>
<td>1,069,695</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>109,570</td>
<td>-</td>
<td>109,570</td>
</tr>
<tr>
<td>Other comprehensive loss for the year</td>
<td>6,547</td>
<td>(21,819)</td>
<td>(14,272)</td>
</tr>
<tr>
<td>Total comprehensive income for the year</td>
<td>116,523</td>
<td>(21,819)</td>
<td>94,704</td>
</tr>
<tr>
<td>Balance as at 30 June 2019</td>
<td>1,125,442</td>
<td>39,359</td>
<td>1,164,801</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>165,388</td>
<td>-</td>
<td>165,388</td>
</tr>
<tr>
<td>Other comprehensive income for the year</td>
<td>10,480</td>
<td>2,108</td>
<td>12,588</td>
</tr>
<tr>
<td>Total comprehensive income for the year</td>
<td>175,868</td>
<td>2,108</td>
<td>177,976</td>
</tr>
<tr>
<td>Balance as at 30 June 2020</td>
<td>1,300,919</td>
<td>44,467</td>
<td>1,345,377</td>
</tr>
</tbody>
</table>

The annexed notes form an integral part of these financial statements.

MANAGING DIRECTOR

BOARD MEMBER
Private Power and Infrastructure Board
Cash Flow Statement
For The Year Ended 30 June 2020

2020 2019
(Rupees in thousand)

CASH FLOWS FROM OPERATING ACTIVITIES
Profit before tax 170,458 165,218
Adjustments for non-cash and other items:
Depreciation 7,681 11,328
Amortization 199 199
Return on held to maturity investments (110,469) (73,566)
Income on bank deposits (15,759) (8,810)
Interest on loan to employees (5,651) (3,439)
Provision for staff gratuity 32,482 32,218
Provision for leave encashment 16,598 16,302
Gain on sale of property and equipment - (2,031)
Unrealized foreign exchange gain - net (14,685) (13,063)
Net cash generated from operating activities 79,850 2,436

Effect of working capital changes:
(Increase) / decrease in advances, prepayments and other receivables (8,090) 44,228
Increase / (decrease) in accrued and other liabilities 26,811 (59,851)
17,913 (15,623)
Gratuity paid (29,296) (82,588)
Leave encashment paid (16,874) (14,069)
Taxes paid (14,387) (6,096)
Net cash used in operating activities (29,299) (102,253)

CASH FLOWS FROM INVESTING ACTIVITIES
Capital expenditure on property and equipment 10,875 (7,473)
Proceeds from sale of property and equipment - 2,031
Increase in long term loans and advances (2,651) (12,293)
Return on bank deposits 15,029 7,592
Interest on loan to employees 6,651 3,439
Return on held to maturity investments received 84,628 59,851
Investment made - net (146,185) (733,113)
Net cash used in investing activities (27,623) (299,970)

CASH FLOWS FROM FINANCING ACTIVITIES - -

NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS 10,581 (415,910)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR 103,672 206,451
EFFECT OF EXCHANGE RATE CHANGES 32,458 313,131
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR 146,203 103,672

The annexed notes form an integral part of these financial statements.

MANAGING DIRECTOR
BOARD MEMBER

Private Power and Infrastructure Board
Notes to the Financial Statements
For The Year Ended 30 June 2020

1 STATUS AND OPERATIONS
1.1 Private Power and Infrastructure Board (PPIB) was constituted in August 1994 under a Federal Government Notification to act as a non-profit organization on behalf of all the agencies and Ministries of the Government of Pakistan (GOP) to process and facilitate private sector power projects, monitor their performance and perform all other related functions. The registered office of PPIB is situated at Phase Area, Sector C-6/1, Islamabad.

1.2 Private Power and Infrastructure Board (PPIB) Act No. VI of 2012 (the Act), was enacted on 02 March 2012 for establishment of PPIB as a body corporate having perpetual succession & common seal, independent in performance of its functions and competent to sue and be sued in its own name and acquire and hold property. As per the Act, PPIB is responsible for implementing the power policies of the Government of Pakistan, the development and implementation of power projects and related infrastructure in the private sector and on public-private partnership basis, enter into agreements & contracts to provide for matters connected therein or incidental thereto, etc.

Upon commencement of the Act, the Private Power and Infrastructure Board established vide Federal Government's Notification (hereinafter referred to as the former Board) stood dissolved and consequent to such dissolution:

(a) all assets, rights, powers, authorities and privileges and all property, cash and bank balances, reserve funds, investment and all other interests and rights in or arising out of such property and all debts, liabilities and obligations of whatever kind of the former board subsisting immediately before its dissolution stood transferred to and vested in PPIB constituted under the Act;
(b) all debts and obligations incurred or contracts entered into, rights acquired and all matters and things engaged to be done by, with or for the former Board are deemed to have been incurred, entered into, acquired or engaged to be done by, with or for PPIB;
(c) all suits and other legal proceedings instituted by or against the former Board will be proceeded or otherwise dealt with accordingly; and
(d) any reference to the former Board in any statutory instrument or document shall, unless the context otherwise requires, be read and construed as reference to PPIB.

2 BASIS OF PREPARATION
2.1 Statement of compliance
These financial statements have been prepared in accordance with approved accounting standards as applicable in Pakistan. Approval auditing standards comprise of such International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board as applicable in Pakistan.

2.2 Accounting convention
These financial statements have been prepared on the historical cost basis except financial instruments which are carried at their fair values or amortized cost and staff retirement gratuity which is carried at present value of defined benefit obligations net of fair value of plan assets. Assets transferred from Private Power Cell (PPC) are carried at their assigned values as explained in note 3.1 to the financial statements.

2.3 Critical accounting estimates and judgments
The preparation of financial statements in conformity with the approved accounting standards requires the use of certain critical accounting estimates. It also requires the management to exercise its judgment in the process of applying PPIB's accounting policies. Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The areas where various assumptions and estimates are significant to PPIB's financial statements or where judgments were exercised in application of accounting policies are as follows:
Useful lives, patterns of economic benefits and impairments

Estimates with respect to residual values, useful lives and pattern of flow of economic benefits are based on the analysis of the management of PP&I. Further, PP&I reviews the value of assets for possible impairment on an annual basis. Any change in the estimates in the future might affect the carrying amount of respective item of property and equipment, with a corresponding effect on the depreciation charge and impairment.

Employee benefits

PP&I operates funded scheme of gratuity for all employees of PP&I, payable on cessation of employment. The provision is made on the basis of actuarial valuation to cover the obligation under the scheme for all employees eligible to scheme benefit.

The amount of the expected return on plan assets is calculated using the expected rate of return for the year and the market-related value at the beginning of the year. Employee benefits scheme cost primarily represents the increase in actuarial present value of the obligation for benefits earned on employees service during the year and the interest on the obligation in respect of employee service in previous years, net of the expected return on plan assets. Calculations are sensitive to changes in the underlying assumptions.

Income tax

In making the estimates for income tax currently payable by PP&I, the management takes into account the current income tax law and the decisions of appellate authorities on certain issues in the past.

2.4 Standards, interpretations and amendments to published approved accounting standards that are effective in current year and are relevant to PP&I

Following standards, interpretations and amendments to published approved accounting standards are mandatory for PP&I's accounting periods beginning on or after 01 July 2019:

- IFRS 16 ‘Leases’
- IFRS 9 (Amendments) ‘Financial Instruments’
- IAS 28 (Amendments) ’Investments in Associates and Joint Ventures’
- IFRIC 23 ‘Uncertainty over Income Tax Treatments’
- IASB’s Annual Improvements to IFRSs: 2015 - 2017 Cycle

The above mentioned accounting standards did not have any impact on the amounts recognized in prior periods and are not expected to significantly affect the current or future periods.

2.5 Standards and amendments to published approved accounting standards that are effective in current year but not relevant to PP&I

There are other standard and amendments to published standards that are mandatory for accounting period beginning on or after 01 July 2019 but are considered not to be relevant or do not have any significant impact on the PP&I's financial statements and are therefore, not detailed in these financial statements.

2.6 Amendments to published approved accounting standards that are not yet effective but relevant to PP&I

Following amendments to existing standards have been published and are mandatory for PP&I's accounting periods beginning on or after 01 July 2020 or later periods:

Amendments to IAS 1 ‘Presentation of Financial Statements’ and IAS 8 ‘Accounting Policies, Changes in Accounting Estimates and Errors’ (effective for annual periods beginning on or after 01 January 2020). The amendments are intended to make the definition of material in IAS 1 easier to understand and are not intended to alter the underlying concept of materiality in IFRS. In addition, the IASB has also issued guidance on how to make materiality judgments when preparing general purpose financial statements in accordance with IFRS.

On 29 March 2018, the International Accounting Standards Board (the IASB) issued a revised Conceptual Framework. The new Framework re-introduces the terms stewardship and prudence; introduces a new asset definition that focuses on rights and a new liability definition that is likely to be broader than the definition it replaces, but does not change the distinction between a liability and an equity instrument; removes from the asset and liability definitions references to the expected flow of economic benefits this lowers the hurdle for identifying the existence of an asset or liability and puts more emphasis on reflecting uncertainty in measurement; discusses historical cost and current value measures, and provides some guidance on how the IASB would go about selecting a measurement basis for a particular asset or liability; states that the primary measure of financial performance is profit or loss, and that only in exceptional circumstances will the IASB use other comprehensive income and only for income or expenses that arise from a change in the current value of an asset or liability; and discusses accounting, derecognition, split-off, split of account, the reporting entity and combined financial statements.

The Framework is not an IFRS standard and does not override any standard, so nothing will change in the short term. The revised Framework will be used in future standard-setting decisions, but no changes will be made to current IFRS. Preparers might also use the Framework to assist them in developing accounting policies where an issue is not addressed by an IFRS. It is effective for annual periods beginning on or after 01 January 2020 for preparers that develop an accounting policy based on the Framework.

Amendments to IFRS 3 ‘Business Combinations’ (effective for annual periods beginning on or after 01 January 2020). The International Accounting Standards Board (IASB) has issued ‘Definition of business’ aimed at resolving the difficulties that arise when an entity determines whether it has acquired a business or a group of assets. The amendments clarify that to be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. The amendments include an election to use a concentration test. The standard is effective for transactions in the future and therefore, would not have an impact on past financial statements.

Interest Rate Benchmark Reform which amended IFRS 9 ‘Financial Instruments’, IAS 29 ‘Financial Instruments: Recognition and Measurement’ and IFRS 7 ‘Financial Instruments: Disclosures’ is applicable for annual financial periods beginning on or after 01 January 2020. The G20 asked the Financial Stability Board (FSB) to undertake a fundamentals review of major interest rate benchmarks. Following the review, the FSB published a report setting out its recommended reforms of some major interest rate benchmarks such as LIBORs. Public authorities in many jurisdictions have since taken steps to implement those recommendations. This has in turn led to uncertainty about the long-term viability of some interest rate benchmarks. In these amendments, the term ‘interest rate benchmark reform’ refers to the market-wide reform of an interest rate benchmark including its replacement with an alternative benchmark rate, such as that resulting from the FSB’s recommendations set out in its July 2014 report ‘Reforming Major Interest Rate Benchmarks’ (the reform). The amendments made provide relief from the potential effects of the uncertainty caused by the reform. A PP&I shall apply the exceptions to all hedging relationships directly affected by interest rate benchmark reform.

Classification of liabilities as current or non-current (Amendments to IAS 1 ‘Presentation of Financial Statements’) effective for the annual period beginning on or after 01 January 2022. These amendments addresses the nature of ‘as of current period’ by requiring that the assessment of the entity’s right at the end of the reporting period to defer the settlement of liability for at least twelve months after the reporting period. An entity shall apply those amendments retrospectively in accordance with IASB’s ‘Accounting Policies, Changes in Accounting Estimates and Errors’.

Onemex Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37 ‘Provisions, Contingent Liabilities and Contingent Assets’) effective for the annual period beginning on or after 01 January 2022 amends IAS 1 ‘Presentation of Financial Statements’ by mainly adding paragraphs which clarify what comprises the cost of fulfilling a contract. Cost of fulfilling a contract is relevant when determining whether a contract is onerous. An entity is required to apply the amendments to contracts for which it has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies this standard. The amendments are not retroactive. Instead, the amendments require an entity to recognize the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings or other component of equity, as appropriate, at the date of initial application.
Private Power and Infrastructure Board

Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16 ‘Property, Plant and Equipment’) effective for the annual period beginning on or after 1 January 2023. Clarifies that sales proceeds and cost of items produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended by management are recognized in profit or loss in accordance with applicable Standards. The entity measures the cost of those items applying the measurement requirements of IAS 2 ‘Inventories’. The standard also removes the requirement of deducting the net salvage proceeds from cost of testing. An entity should apply those amendments retrospectively, but only to items of property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments. The entity shall recognize the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the beginning of that earliest period presented.

The following annual improvements to IFRS standards 2018-2020 are effective for annual reporting periods beginning on or after 1 January 2022:

- IFRS 9 ‘Financial Instruments’ – The amendment clarifies that an entity includes only face paid or received between the entity (the borrower) and the lender, including face paid or received by either the entity or the lender on the entity’s behalf, when it applies the ‘10 per cent’ test in paragraph 83.6.6 of IFRS 9 in assessing whether to derecognize a financial liability.

- IFRS 16 ‘Leases’ – The amendment partially amends Illustrative Example L3 accompanying IFRS 16 ‘Leases’ by excluding the illustration of remeasurement of leasehold improvements by the lessee. The objective of the amendment is to resolve any potential confusion that might arise in lease incentives.

The above amendments and improvements do not have a material impact on the financial statements.

2.7 Standards, interpretations and amendments to approved public standards that are not yet effective and not considered relevant to PPIB

There are other standards and amendments to published standards that are mandatory for accounting periods beginning on or after 1 January 2020 but are considered not to be relevant or do not have any significant impact on PPIB’s financial statements and are therefore not detailed in these financial statements.

2.8 Functional and presentation currency

These financial statements are presented in the currency of the primary economic environment in which PPIB operates. The functional and presentation currency are presented in Pakistani Rupees, which is PPIB’s functional currency.

3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

3.1 Property and equipment

a) Cost

Tangible assets except those transferred from PFC and leasehold land are stated at cost less accumulated depreciation and impairment loss (if any). Property and equipment transferred from PFC are stated at assigned values less depreciation and impairment loss (if any) with corresponding credit to a property and equipment reserve which has been amortized in full over the useful life of those assets. Leasehold land is carried at cost less impairment, if any.

Subsequent costs are included in the asset’s carrying amount when it is probable that future economic benefits associated with the item will flow to PPIB and the cost of the item can be measured reliably. Carrying amount of the replaced part is derecognized.

b) Depreciation

Depreciation is charged on the straight line method so as to allocate their cost over their estimated useful life at the rates specified in note 4 to these financial statements.

Depreciation is charged on pro-rata basis from the month in which an asset is acquired while no depreciation is charged for the month in which the asset is disposed off. Days in excess of fifteen days are considered as full months for the purpose of calculation of depreciation.

c) Repairs and maintenance

Maintenance and normal repairs, including minor alterations, are charged to income as and when incurred.

d) Gains and losses on disposal

Gains and losses on disposal of assets are included in income and expenditure account currently. All other repairs and maintenance are charged to income during the year. Gains and losses on disposal of property and equipment are included in the income and expenditure account currently.

e) Capital work in progress

Capital work in progress is stated at cost.

3.2 Intangible assets

An intangible asset is recognized if it is probable that future economic benefits that are attributable to the asset will flow to PPIB and that the cost of such asset can also be measured reliably. Intangible assets having indefinite useful life are stated at cost less accumulated amortization or impairment loss, if any. Amortization is based on the pattern in which the assets’ economic benefits are consumed. Intangible assets which have indefinite useful life are not amortized and tested for impairment, if any.

Amortization is recognized in income and expenditure account on a straight line basis @ 10% per annum, from the month the asset is available for use.

Subsequent expenditure is capitalized only when it increases the future economic benefit embodied in the specific asset to which it relates. All other expenditure is recognized in income and expenditure account as incurred.

3.3 IFRS 16 ‘Leases’

PPIB has adopted IFRS 16 from 1 July 2019. The standard replaces IAS 17 ‘Leases’ and for lessees eliminates the classifications of operating leases and finance leases. Except for short-term leases and leases of low-value assets, right-of-use assets and corresponding lease liabilities are recognized in the statement of financial position. Straight-line operating lease expense recognition is replaced with a depreciation charge for the right-of-use assets (included in operating costs) and an interest expense on the recognized lease liabilities (included in finance costs). In the earlier periods of the lease, the expenses associated with the lease under IFRS 16 will be higher when compared to lease expenses under IAS 17, as the operating expense is now replaced by interest expense and depreciation in the statement of profit or loss. For classification within the statement of cash flows, the interest portion is disclosed in operating activities and the principal portion of the lease payments is separately disclosed in financing activities. For lessor accounting, the standard does not substantially change how a lessor accounts for leases.

The adoption of IFRS 16 has no financial impact on the financial statements of the PPIB.

Right-of-use assets

A right-of-use asset is recognized at the commencement date of a lease. The right-of-use asset is measured at cost, which comprises the initial amount of the lease liability, adjusted for, as applicable, any lease payments made at or before the commencement date net of any lease incentives received, any initial direct costs incurred, and, except where included in the cost of inventories, an estimate of costs expected to be incurred for dismantling and removing the underlying asset, and restoring the site or asset.

Right-of-use assets are depreciated on a straight-line basis over the unexpired period of the lease or the estimated useful life of the asset, whichever is shorter. Where the PPIB expects to obtain ownership of the leased asset at the end of the lease term, the depreciation is charged over its estimated useful life. Right-of-use assets are subject to impairment or adjusted for any re-measurement of lease liabilities.

PPIB has elected not to recognize a right-of-use asset and corresponding lease liability for short-term leases with terms of 12 months or less and leases of low-value assets. Lease payments on these assets are charged to income as incurred.
3.6 De-recognition

a) Financial assets

PPB derecognizes a financial asset when the contractual rights to the cash flows from the asset expires, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred, or it neither transfers nor retains substantially all of the risks and rewards of ownership and does not retain control over the transferred asset. Any interest in such de-recognized financial assets that is created or retained by PPB is recognized as a separate asset or liability.

b) Financial liabilities

PPB derecognizes a financial liability (or a part of financial liability) from its statement of financial position when the obligation specified in the contract is discharged or cancelled or expires.

3.7 Offsetting of financial instruments

Financial assets and financial liabilities are set off and the net amount is reported in the financial statements when there is a legal enforceable right to set off and PPB intends either to settle on a net basis or to realize the assets and to settle the liabilities simultaneously.

3.8 Trade debts and other receivables

Trade receivables are initially recognized at fair value and subsequently measured at amortized cost using the effective interest method, less any allowance for expected credit losses. Trade receivables generally do not include amounts over due by 365 days.

PPB has applied the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance. To measure the expected credit losses, trade receivables have been grouped based on days overdue. Other receivables are recognized at amortized cost, less any allowance for expected credit losses.

3.9 Accrued and other liabilities

Liabilities for trade and other payables are carried at cost which is the fair value of the consideration to be paid in the future for goods and services received.

3.10 Employee retirement benefits

The main features of the retirement benefit schemes operated by PPB for its employees are as follows:

3.10.1 Defined benefit plans

PPB has in place a defined benefit funded gratuity for all eligible employees who complete qualifying period of service and age.

The fund is administered by trustees. Annual contributions to the gratuity fund are based on actuarial valuation using Projected Unit Credit Method, related details of which are given in note 14 to the financial statements. The obligation at the reporting date is measured at the present value of the estimated future cash outflows. All contributions are charged to income and expenditure account for the year. The latest actuarial valuation was carried out on 30 June 2018.

Actual gains and losses (remeasurement gains / losses) on employees’ retirement benefit plans are recognized immediately in other comprehensive income and post service cost is recognized in income and expenditure account when they occur.

Calculation of actuary requires assumptions to be made of future outcomes which mainly include increase in remuneration, expected long-term return on plan assets and the discount rate used to convert future cash flows to current values. Calculations are sensitive to changes in the underlying assumptions.

3.10.2 Defined contribution plan

PPB operates and manages a contributory provident fund scheme for all its regular employees who have completed the probation period. PPB has created a trust for this purpose and has applied to Commissioner of Income tax for recognition of the fund under the provisions of part 1 of sixth schedule of Income Tax Ordinance, 2001.

Equal monthly contributions are made by PPB and the employees at the rate of 5% of basic salary. Contributions are charged to income and expenditure account.

3.11 Leave encashment

PPB also has a policy whereby all its employees are able to encash accumulated leave balance as per PPB service rules. Provision is made in the financial statements for the amount payable on account of unavailed leave balance of the employees. Provision for leave encashment is made for unavailed leave balance at an end at the rate of 2.5 days for every calendar month of duty period rendered by them.

3.12 Taxation

Income tax expense comprises of current and deferred tax.

Current

Provision for current tax is based on the taxable income for the year determined in accordance with the prevailing law for taxation of income. The charge for current tax is calculated using prevailing tax rates or tax rates expected to apply to the profit for the year, if enacted. The charge for current tax also includes adjustments, where considered necessary, to provision for tax made in previous years arising from assessments framed during the year for such years.

Deferred tax

Deferred tax is accounted for using the statement of financial position liability method in respect of all temporary differences arising from differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of the taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences and deferred tax assets to the extent that it is probable that taxable profits will be available against which the deductible temporary differences, unused tax losses and tax credits can be utilized.

Deferred tax is calculated at the rates that are expected to apply to the period when the differences reverse based on tax rates that have been enacted or substantively enacted by the reporting date. Deferred tax is charged or credited in the statement of profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

3.13 Revenue recognition

Income as presented in income and expenditure statement is the revenue as defined under IFRS 15 - Revenue from Contracts with Customers. IFRS 15 establishes the principles that an entity shall apply about the nature, amount, timing, and uncertainty of revenue and cash flows arising from a contract with a customer. Revenue is recognised from different sources as follows:

Registration fee, request for quotation fee, expression of interest fee and project processing fee is recognized on receipt basis.

- extension and issuance of letter of intent (LOI) and letter of support (LOS) is recognized on meeting performance obligation which is dependent upon approval of Board.

Revenue from profit on bank balances, investments, operations and other income is recognized on accrual basis. Dividend income is recognized when the right to receive dividend is established.

Proceeds from encashment of performance guarantees is recognized as income in the year in which the guarantee is encashed and the management believes that the outcome of the transaction can be estimated reliably.

3.14 Off-setting

Financial assets and liabilities are set off in the statement of financial position, only when PPB has a legally enforceable right to set off the recognized amounts and intends either to settle on a net basis or to realize the assets and settle the liabilities simultaneously.

3.15 Foreign currencies

Transactions in foreign currencies are recorded at the rates of exchange ruling on the date of the transaction. All monetary assets and liabilities denominated in foreign currencies are translated into Pak rupees at the rate of exchange ruling on the statement of financial position date and exchange differences, if any, are charged to Income for the current year.

3.16 Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and balances with banks.

3.17 Provisions

Provision are recognized when PPB has a legal or constructive obligation as a result of past events and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligations and a reliable estimate of the amount can be made.
4 PROPERTY AND EQUIPMENT

<table>
<thead>
<tr>
<th></th>
<th>Leasehold land</th>
<th>Furniture and Fixtures</th>
<th>Leasehold improvements</th>
<th>Computer equipment</th>
<th>Office equipment</th>
<th>Air conditioners</th>
<th>Vehicles</th>
<th>Roads, trails, and squares</th>
<th>Capital work in progress</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 30 June 2018</td>
<td>25,024</td>
<td>7,320</td>
<td>37,299</td>
<td>20,039</td>
<td>7,139</td>
<td>462</td>
<td>21,915</td>
<td>926</td>
<td>15,666</td>
<td>106,965</td>
</tr>
<tr>
<td>Cost</td>
<td>25,024</td>
<td>7,320</td>
<td>37,299</td>
<td>20,039</td>
<td>7,139</td>
<td>462</td>
<td>21,915</td>
<td>926</td>
<td>15,666</td>
<td>106,965</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(4,504)</td>
<td>(1,904)</td>
<td>(12,384)</td>
<td>(3,294)</td>
<td>(1,438)</td>
<td>(134)</td>
<td>(7,234)</td>
<td>(356)</td>
<td>(5,877)</td>
<td>(56,764)</td>
</tr>
<tr>
<td>Year ended 30 June 2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening net book value</td>
<td>20,520</td>
<td>5,416</td>
<td>24,915</td>
<td>16,745</td>
<td>5,601</td>
<td>328</td>
<td>14,681</td>
<td>860</td>
<td>19,789</td>
<td>67,198</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>1,194</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Disposals</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cost</td>
<td>20,520</td>
<td>6,609</td>
<td>26,019</td>
<td>16,745</td>
<td>5,601</td>
<td>328</td>
<td>14,681</td>
<td>860</td>
<td>19,789</td>
<td>67,198</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(4,987)</td>
<td>(1,904)</td>
<td>(12,384)</td>
<td>(3,294)</td>
<td>(1,438)</td>
<td>(134)</td>
<td>(7,234)</td>
<td>(356)</td>
<td>(5,877)</td>
<td>(56,764)</td>
</tr>
<tr>
<td>Depreciation charge</td>
<td>(5,573)</td>
<td>(1,904)</td>
<td>(12,384)</td>
<td>(3,294)</td>
<td>(1,438)</td>
<td>(134)</td>
<td>(7,234)</td>
<td>(356)</td>
<td>(5,877)</td>
<td>(56,764)</td>
</tr>
<tr>
<td>At 30 June 2019</td>
<td>15,337</td>
<td>4,715</td>
<td>13,635</td>
<td>13,451</td>
<td>4,173</td>
<td>194</td>
<td>7,447</td>
<td>503</td>
<td>13,912</td>
<td>49,432</td>
</tr>
<tr>
<td>Cost</td>
<td>15,337</td>
<td>4,715</td>
<td>13,635</td>
<td>13,451</td>
<td>4,173</td>
<td>194</td>
<td>7,447</td>
<td>503</td>
<td>13,912</td>
<td>49,432</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(3,819)</td>
<td>(1,904)</td>
<td>(12,384)</td>
<td>(3,294)</td>
<td>(1,438)</td>
<td>(134)</td>
<td>(7,234)</td>
<td>(356)</td>
<td>(5,877)</td>
<td>(56,764)</td>
</tr>
<tr>
<td>Year ended 30 June 2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening net book value</td>
<td>11,518</td>
<td>2,801</td>
<td>9,734</td>
<td>9,157</td>
<td>2,737</td>
<td>114</td>
<td>5,233</td>
<td>273</td>
<td>9,464</td>
<td>35,972</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>1,194</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Disposals</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cost</td>
<td>11,518</td>
<td>3,995</td>
<td>10,928</td>
<td>9,157</td>
<td>2,737</td>
<td>114</td>
<td>5,233</td>
<td>273</td>
<td>9,464</td>
<td>35,972</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td>(3,087)</td>
<td>(1,904)</td>
<td>(12,384)</td>
<td>(3,294)</td>
<td>(1,438)</td>
<td>(134)</td>
<td>(7,234)</td>
<td>(356)</td>
<td>(5,877)</td>
<td>(56,764)</td>
</tr>
<tr>
<td>Depreciation charge</td>
<td>(5,431)</td>
<td>(1,904)</td>
<td>(12,384)</td>
<td>(3,294)</td>
<td>(1,438)</td>
<td>(134)</td>
<td>(7,234)</td>
<td>(356)</td>
<td>(5,877)</td>
<td>(56,764)</td>
</tr>
<tr>
<td>Rate of depreciation (per annum)</td>
<td>-20%</td>
<td>-10%</td>
<td>-12%</td>
<td>-20%</td>
<td>-10%</td>
<td>-12%</td>
<td>-20%</td>
<td>-10%</td>
<td>-12%</td>
<td>-20%</td>
</tr>
</tbody>
</table>

4.3 Capital work in progress
This represents payments made to National Engineering Services Pakistan (Private) Limited, Capital Development Authority and Pakistan Environmental Protection Agency for planning and designing of construction of buildings on leasehold land.

5 INTANGIBLE ASSETS - Computer softwares

<table>
<thead>
<tr>
<th>NOTE</th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year ended 30 June</td>
<td>Opening book value</td>
<td>1,158</td>
</tr>
<tr>
<td>Amortization</td>
<td>(199)</td>
<td>(199)</td>
</tr>
<tr>
<td>Closing net book value</td>
<td>959</td>
<td>1,158</td>
</tr>
<tr>
<td>Cost as at 30 June</td>
<td>2,068</td>
<td>2,068</td>
</tr>
<tr>
<td>Accumulated amortization</td>
<td>(1,109)</td>
<td>(910)</td>
</tr>
<tr>
<td>Net book value</td>
<td>959</td>
<td>1,158</td>
</tr>
<tr>
<td>Amortization rate</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

6 LONG TERM INVESTMENTS

Fair value through other comprehensive income
National Investment Trust (NIT) 1,462,633 units (2019: 1,963,112 units)
Surplus / (deficit) on remeasurement of investment to fair value | 87,097 | 107,173 |
| Surplus / (deficit) on revaluation of investment to fair value | 2,069 | (22,103) |
| Total | 90,066 | 85,070 |

7 LOANS AND ADVANCES - at amortized cost

Loans and advances - considered good
7.1 & 7.2 | 53,688 | 51,007 |
Less: Current portion shown under current assets | 9 | (14,942) | (11,689) |
| Total | 35,946 | 39,318 |

7.1 These represent loan to employees for house construction, medical and other purposes and carry interest at the rate of one year KIBOR prevailing when loan is granted. These are recoverable in equal monthly installments spread over a period of 5 years and are secured against future gratuity payments of the employees and also indemnity bonds in favor of PPIB executed by two employees of PPIB acting as sureties on behalf of employee obtaining loan.

7.2 Loans to key management personnel
Opening balance | 22,956 | 33,029 |
| Loans adjusted during the year | (6,617) | (10,073) |
| Closing balance | 16,334 | 22,956 |

8 DEFERRED INCOME TAX ASSET

This comprises of following:
Deferred tax liability on taxable temporary differences in respect of:
Accelerated depreciation | (7,581) | (6,069) |
| Surplus on remeasurement of investments to fair value | (956) | (6,069) |
| Deferred tax asset on deductible temporary differences in respect of:
Provision for staff gratuity | 11,645 | 9,343 |
| Provision for leave encashment | 6,894 | 271 |
| Deficit on remeasurement of investments to fair value | 18,541 | 9,614 |
| Total | 16,736 | 3,945 |
8.1 Movement in deferred income tax asset

<table>
<thead>
<tr>
<th>As at 01 July 2019</th>
<th>Statement of profit or loss (Note 26)</th>
<th>Other comprehensive income</th>
<th>As at 30 June 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rupees in thousand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------</td>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Accelerated tax depreciation</td>
<td>(6,069)</td>
<td>(1,512)</td>
<td>(7,581)</td>
</tr>
<tr>
<td>Deficit / (surplus) on remeasurement of investments</td>
<td>271</td>
<td>(861)</td>
<td>(590)</td>
</tr>
<tr>
<td>Provision for gratuity</td>
<td>9,343</td>
<td>6,583</td>
<td>12,065</td>
</tr>
<tr>
<td>Provision for leave encashment</td>
<td>6,856</td>
<td>6,856</td>
<td>6,856</td>
</tr>
<tr>
<td>Deferred income tax asset</td>
<td>2,545</td>
<td>11,967</td>
<td>15,127</td>
</tr>
</tbody>
</table>

8.2 Deferred income tax asset of Rupees 211.057 million (2019: Rupees 288.847 million) on available tax losses has not been recognized in these financial statements as the temporary differences are not expected to reverse in foreseeable future because taxable profits will not probably be available against which the temporary differences can be utilized.

9 ADVANCES, PREPAYMENTS AND OTHER RECEIVABLES

Advances to:
- employees against provident fund 1,735 1,735
- suppliers / services 142 149
- employees against expenses 566 1,461
  subtotal 2,883 3,445
Current portion of loans and advances 7 14,842 11,688
Prepayments 2,343 1,339
Accrued interest on bank balances 110 3,795
Accrued interest on account of fees 2,224 7,898
Other receivables 1,524 3,607
  total 9,497 18,275

9.1 This represents accrued fee in respect of extension of “letter of intent” LCI and “letter of support” LDB approved by Board of Directors for various Independent Power Producers (IPPs).

10 ADVANCE TAX

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at the beginning of the year</td>
<td>5,416</td>
<td>27,248</td>
</tr>
<tr>
<td>Income tax paid / deducted at source</td>
<td>13,387</td>
<td>6,096</td>
</tr>
<tr>
<td>Provision for taxation - current 26</td>
<td>(17,037)</td>
<td>(23,020)</td>
</tr>
<tr>
<td>Balance at the end of the year</td>
<td>1,768</td>
<td>3,948</td>
</tr>
</tbody>
</table>

10.1 This represents tax withholding suffered at source and includes an amount of Rupees 8.9 million relating to tax years 2009, 2010 and 2011 in whose respect, the refund applications were filed by the Board with tax authorities on 26 August 2011. A reminder of the same was filed on 18 June 2012 whereas, the aforesaid applications were rejected by the Officer Inland Revenue, Regional Tax Office, Islamabad. PIB had filed appeals with Commissioner Inland Revenue - Appeals (CIR – A) in this respect which were rejected. Thereafter, PIB filed appeals with Appellate Tribunal Inland Revenue (ATIR). In disposing off the appeal, the ATIR has vacated the order of CIR-A and directed PIB to approach the Taxation Officer (TO) and the TO has been directed that he may consult Federal Board of Revenue for procedure in such cases. However, PIB has claimed credit of aforesaid refund amount of Rupees 8.9 million against tax liability in the income tax return for tax year 2018.
13 PROVISION AGAINST PERFORMANCE GUARANTEE ENCASHED

<table>
<thead>
<tr>
<th>NOTE</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Rupess in thousand)</td>
<td></td>
</tr>
<tr>
<td>13.2</td>
<td>41,066</td>
<td>41,066</td>
</tr>
<tr>
<td>12.3</td>
<td>78,400</td>
<td>78,400</td>
</tr>
<tr>
<td>13.4</td>
<td>23,500</td>
<td>23,500</td>
</tr>
<tr>
<td>13.5</td>
<td>439,520</td>
<td>439,520</td>
</tr>
<tr>
<td>12.5</td>
<td>81,000</td>
<td>81,000</td>
</tr>
<tr>
<td>12.6</td>
<td>164,000</td>
<td>164,000</td>
</tr>
<tr>
<td>13.7</td>
<td>829,466</td>
<td>829,466</td>
</tr>
<tr>
<td>13.8</td>
<td>194,158</td>
<td>194,158</td>
</tr>
<tr>
<td>13.9</td>
<td>846,322</td>
<td>846,322</td>
</tr>
</tbody>
</table>

13.1 Movement of provision against performance guarantees encashed

| Balance at the beginning | 829,466 | 829,466 |
| Exchange loss | 17,765 | 17,069 |
| Balance at the end | 846,322 | 829,466 |

13.2 Based on order of Islamabad High Court dated 4 April 2013, PPB had to pay the amount of performance guarantees of Rupees 1.00 million along with profits amounting to Rs 5,000,000. PPB may be required to pay further amount of Rupees 0.50 million as per consent order vide order dated 20 March 2019 of Islamabad High Court filed by S Ricardo Power Corporation of Pakistan Limited which was challenged by the PPB in apex court of Pakistan where the matter is pending adjudication.

13.3 In June 1999, Star Energy Ventures Pakistan Limited filed a writ petition before the High Court challenging the agreement of performance guarantee by PPB and PPB may be required to pay the said amount.

13.4 Star Power Generation Company Limited has filed a writ petition before the High Court challenging the agreement of performance guarantee by PPB and PPB may be required to pay the said amount.

13.5 In April 2010, PPB issued LOS to Mina Power Limited for the establishment of 100 MW Hydro power project on the Panjnad River, near Kotli which located in the territory of the State of Kashmir, Pakistan. (AJ & K) Due to the failure to achieve financial close on the specified date (i.e. 29 April 2013), the performance guarantee was rescinded on 29 May 2013. As per the agreement of agency between PPB and AJ & K Council, "The Authorized Agent (PPB) will transfer the Principal (AJ & K Council) full amount of bank guarantee and hold proceeds following the settlement in the event of default by sponsors or project company less any actual legal expenses incurred by the Authorized Agent. In case the PPB's act of encashment of performance guarantee is contested at court of law then after three years the amount shall be payable by PPB to AJ & K Council.

13.6 The provision mentioned above are being carried on the basis of management's assessment of related cases. Further, PPB is also defending its views before the High Court in connection with the above cases filed by the aforesaid entities.

14 STAFF BENEFITS

<table>
<thead>
<tr>
<th>NOTE</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Rupess in thousand)</td>
<td></td>
</tr>
<tr>
<td>14.1</td>
<td>23,779</td>
<td>24,065</td>
</tr>
<tr>
<td>14.2</td>
<td>40,155</td>
<td>51,733</td>
</tr>
<tr>
<td>14.3</td>
<td>63,934</td>
<td>75,798</td>
</tr>
</tbody>
</table>

14.1 Movement of provision for leave encashment is as follows:

| Balance at the beginning | 24,065 | 24,065 |
| Expense for the year | 20,158 | 20,158 |
| Payments made during the year | 16,824 | 16,824 |
| Balance at the end | 23,779 | 24,065 |

14.2 Gratuity

The latest actuarial valuation was carried out as at 30 June 2020, using the projected unit credit method. The amounts recognized in financial statements are determined as follows:

<table>
<thead>
<tr>
<th>NOTE</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Rupess in thousand)</td>
<td></td>
</tr>
<tr>
<td>14.2.1</td>
<td>356,785</td>
<td>322,679</td>
</tr>
<tr>
<td>14.2.2</td>
<td>(716,625)</td>
<td>(709,928)</td>
</tr>
<tr>
<td>14.2.3</td>
<td>40,055</td>
<td>51,733</td>
</tr>
</tbody>
</table>

14.2.2 The amounts recognized in the statement of financial position are as follows:

- Present value of defined benefit obligation
- Fair value of plan assets

14.2.4 Based on the actuarial valuation, a contribution of Rs 29,634 million is expected to be paid to the defined benefit plan during the year ending 30 June 2021.
14.2.9 Re-measurements recognized in other comprehensive income during the year:

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reremiseement gain on obligation</td>
<td>25,817</td>
<td>11,421</td>
</tr>
<tr>
<td>Reremiseement loss on plant assets</td>
<td>21,443</td>
<td>(2,237)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47,260</strong></td>
<td><strong>9,184</strong></td>
</tr>
</tbody>
</table>

14.2.10 Sensitivity analysis:

<table>
<thead>
<tr>
<th></th>
<th>2020 (%)</th>
<th>2019 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount Rate 1%</td>
<td>328,512</td>
<td>297,992</td>
</tr>
<tr>
<td>Discount Rate -1%</td>
<td>360,874</td>
<td>351,148</td>
</tr>
<tr>
<td>Salary growth rate 1%</td>
<td>388,759</td>
<td>359,934</td>
</tr>
<tr>
<td>Salary growth rate -1%</td>
<td>328,156</td>
<td>297,884</td>
</tr>
</tbody>
</table>

14.2.11 Plan assets:

<table>
<thead>
<tr>
<th></th>
<th>2020 (%)</th>
<th>2019 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond</td>
<td>91.32%</td>
<td>90.72%</td>
</tr>
<tr>
<td>Equity</td>
<td>1.09%</td>
<td>1.76%</td>
</tr>
<tr>
<td>Cash and/or deposits</td>
<td>7.59%</td>
<td>8.25%</td>
</tr>
</tbody>
</table>

14.2.12 Expected benefit payments for the next 10 years and beyond:

<table>
<thead>
<tr>
<th>Year</th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2021</td>
<td>9,236</td>
<td></td>
</tr>
<tr>
<td>FY 2022</td>
<td>47,805</td>
<td></td>
</tr>
<tr>
<td>FY 2023</td>
<td>45,798</td>
<td></td>
</tr>
<tr>
<td>FY 2024</td>
<td>12,304</td>
<td></td>
</tr>
<tr>
<td>FY 2025</td>
<td>37,834</td>
<td></td>
</tr>
<tr>
<td>FY 2026</td>
<td>50,948</td>
<td></td>
</tr>
<tr>
<td>FY 2027</td>
<td>17,976</td>
<td></td>
</tr>
<tr>
<td>FY 2028</td>
<td>40,634</td>
<td></td>
</tr>
<tr>
<td>FY 2029</td>
<td>13,805</td>
<td></td>
</tr>
<tr>
<td>FY 2030</td>
<td>133,518</td>
<td></td>
</tr>
<tr>
<td>FY 2031 onwards</td>
<td>1,492,690</td>
<td></td>
</tr>
</tbody>
</table>

The average duration of the defined benefit obligation is 8 Years.

14.2.13 Risk associated with defined benefit plans:

Investment risk:
The risk arises when the actual performance of the investment is lower than expectation and thus creating a shortfall in the fund's objective.

Longevity risk:
The risk arises when the actual lifetime of retirees is longer than expectation. This risk is measured at the plan level over the entire retiree population.

Salary increase risk:
The most common type of retirement benefit is where the benefit is linked with final salary. The risk arises when the actual increases are higher than expectation and impacts the liability accordingly.

Withdrawal risk:
The risk of actual withdrawals varying with actuarial assumptions can impose a risk to the benefit obligation. The movement of the liability can go either way.

15 ACCRUED AND OTHER LIABILITIES:

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued expenses</td>
<td>12,551</td>
<td>14,953</td>
</tr>
<tr>
<td>Audit fee payable</td>
<td>763</td>
<td>1,656</td>
</tr>
<tr>
<td>Redemtion money</td>
<td>710</td>
<td>710</td>
</tr>
<tr>
<td>Other payables</td>
<td>7,988</td>
<td>2,519</td>
</tr>
<tr>
<td>Provident fund payable</td>
<td>72,550</td>
<td>48,122</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>94,182</strong></td>
<td><strong>67,351</strong></td>
</tr>
</tbody>
</table>

15.1 Movement of provision for provident fund is as follows:

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at the beginning</td>
<td>48,113</td>
<td>25,281</td>
</tr>
<tr>
<td>Provision for the year</td>
<td>21,334</td>
<td>22,138</td>
</tr>
<tr>
<td>Interest for the year</td>
<td>2,903</td>
<td>2,669</td>
</tr>
<tr>
<td>Payments made during the year</td>
<td>-</td>
<td>(2,145)</td>
</tr>
<tr>
<td>Balance at the end</td>
<td>72,550</td>
<td>48,122</td>
</tr>
</tbody>
</table>

16 PPB Fund:

As per the requirement of Section 14 of the PPB Act (Act No. VI of 2012), the accumulated surplus and Government fund available on the PPB balance sheet as at 1 March 2012 were converted into PPB Fund. The PPB Fund is to be administered and controlled by PPB. The PPB Fund is to be funded through various sources as specified in Section 14 of the PPB Act and expended for operations of PPB for the objects and purposes as specified in Section 15 of the PPB Act.

The total of each financial year, a balance sheet and income and expenditure account is required to be prepared and any profit/loss is to be transferred to the PPB Fund.

17 CONTINGENCIES AND COMMITMENTS:

17.1 Contingent liabilities:

Certain sponsors of power projects have filed suits against Government of Pakistan (GOP) / PPB for aggregate claims against damages of Rs 1,133,457 million (2019: Rs 1,133,457 million) and USD 58 million (2019: USD 58 million). Also, claims have been lodged against the performance guarantee encashed amounting USD 0.2 million (2019: USD 0.2 million). These law suits are currently being defended by PPB. At this stage, neither it is not possible to determine the expected outcome of these litigation or favorable results to PPB are probable. All the cases are pending in the courts of law so the expected timing of outflow of resources cannot be ascertained.

17.2 Commitments:

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>25,671</td>
<td>25,671</td>
</tr>
</tbody>
</table>

18 INCOME FROM OPERATIONS:

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration fee</td>
<td>95</td>
<td>42</td>
</tr>
<tr>
<td>Request for quotation fee</td>
<td>7,950</td>
<td>6,940</td>
</tr>
<tr>
<td>Project processing fee</td>
<td>45,812</td>
<td>45,910</td>
</tr>
<tr>
<td>Issuance of KU/LOD fee</td>
<td>415,955</td>
<td>-</td>
</tr>
<tr>
<td>Extension in LOD/LOD fee</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Proposal processing fee stipulated projects</td>
<td>-</td>
<td>7,512</td>
</tr>
<tr>
<td>Fee for achievement of financial close</td>
<td>51,150</td>
<td>70,170</td>
</tr>
<tr>
<td>Fee for design change</td>
<td>23,340</td>
<td>55,504</td>
</tr>
<tr>
<td>Fee for change in shareholding</td>
<td>35,504</td>
<td>12,984</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>600,606</strong></td>
<td><strong>499,392</strong></td>
</tr>
</tbody>
</table>

19 INCOME FROM FINANCIAL ASSETS:

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on bank deposits</td>
<td>15,754</td>
<td>8,610</td>
</tr>
<tr>
<td>Return on short term investments</td>
<td>110,488</td>
<td>73,566</td>
</tr>
<tr>
<td>Interest on loans to employees</td>
<td>6,651</td>
<td>3,499</td>
</tr>
<tr>
<td>Dividend income</td>
<td>2,793</td>
<td>3,337</td>
</tr>
<tr>
<td>Exchange gain</td>
<td>14,685</td>
<td>125,062</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>149,911</strong></td>
<td><strong>254,415</strong></td>
</tr>
</tbody>
</table>

20 SALARIES AND BENEFITS:

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and allowances</td>
<td>352,570</td>
<td>362,337</td>
</tr>
<tr>
<td>Bonus</td>
<td>60,719</td>
<td>35,074</td>
</tr>
<tr>
<td>Provisions for staff gratuity</td>
<td>32,068</td>
<td>32,210</td>
</tr>
<tr>
<td>Provisions for leave encashment</td>
<td>8,032</td>
<td>1,032</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>457,799</strong></td>
<td><strong>439,657</strong></td>
</tr>
</tbody>
</table>

21 REPAIR AND MAINTENANCE:

<table>
<thead>
<tr>
<th></th>
<th>2020 (Rupees in thousand)</th>
<th>2019 (Rupees in thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle running and maintenance</td>
<td>4,125</td>
<td>4,205</td>
</tr>
<tr>
<td>Office repair, maintenance and renovation</td>
<td>602</td>
<td>682</td>
</tr>
<tr>
<td>Computer repair</td>
<td>847</td>
<td>630</td>
</tr>
<tr>
<td>Equipment repair</td>
<td>256</td>
<td>269</td>
</tr>
<tr>
<td>Furniture repair</td>
<td>23</td>
<td>53</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,345</strong></td>
<td><strong>5,130</strong></td>
</tr>
</tbody>
</table>
22 PRINTING AND STATIONERY

<table>
<thead>
<tr>
<th>NOTE</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer stationery</td>
<td>616</td>
<td>618</td>
</tr>
<tr>
<td>Office stationery</td>
<td>891</td>
<td>768</td>
</tr>
<tr>
<td>Printing</td>
<td>971</td>
<td>677</td>
</tr>
<tr>
<td></td>
<td>2,498</td>
<td>2,063</td>
</tr>
</tbody>
</table>

23 AUDIT FEE

Riaz Ahmad and Company

| Statutory audit fee | 363 | 363 |
| A.F. Ferguson & Co. | 108 | - |
| Gratuity fund audit | 359 | 350 |
| Provident fund audit | 408 | 333 |
| | 939 | 693 |

24 FINANCE COST

| Bank charges | 26 | 90 |
| | 2,963 | 2,769 |

25 OTHER EXPENSES

| Newspapers and periodicals | 336 | 334 |
| Training, conferences and seminars | 1,215 | 2,211 |
| Entertainment and office supplies | 1,384 | 1,738 |
| Security services | 2,492 | 1,861 |
| Miscellaneous | 524 | 723 |
| | 6,481 | 6,992 |

26 TAXATION

Current | 10 | 17,807 | 27,989 |
Deferred | 8.1 | (11,967) | 7,713 |
| | 5,840 | 55,689 |

29 FINANCIAL RISK MANAGEMENT

29.1 Financial risk factors

PPIB's activities expose it to a variety of financial risks: credit risk, liquidity risk and market risk (including currency risk, interest rate risk and price risk). PPIB's overall risk management policy focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on PPIB's financial performance. The Board members have overall responsibility for the establishment and oversight of PPIB's risk management framework. The Board members are also responsible for developing and monitoring PPIB's risk management policies.

This note presents information about PPIB's exposure to each of the above risks, PPIB's objectives, policies and processes for measuring and managing risk, and PPIB's management of fund. Further qualitative disclosures are included throughout these financial statements.

Risk management policies are established to identify and analyze the risks faced by PPIB, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and PPIB's activities. PPIB, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

(a) Market risk

Market risk is the risk that the value of financial instrument, may fluctuate as a result of changes in market interest rates or the market price due to change in credit rating of the issuer or the instrument, change in the market sentiments, speculative activities, supply and demand of securities and liquidity in the market, will affect PPIB's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return on risk. PPIB is exposed to currency risk, interest rate risk and price risk only.

(i) Currency risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. Pak Rupee is the functional currency of PPIB and as a result currency exposure arises from transactions and balances in currencies other than Pak Rupee. PPIB's potential currency exposure comprises:

- Transactional exposure in respect of non-functional currency monetary items.
- Transactional exposure in respect of non-functional currency expenditure and revenues.

The potential currency exposures are discussed below:

- Transactional exposure in respect of non-functional currency monetary items

Monetary items, including financial assets and liabilities, denominated in currencies other than the functional currency of PPIB are periodically related to Pak Rupee equivalent, and the associated gain or loss is taken to the income and expenditure account. The currency risk related to monetary items is managed as part of the risk management strategy.

- Transactional exposure in respect of non-functional currency expenditure and revenues

Performance guarantee unearned income from operations and certain income on investments and bank deposits is earned in currencies other than the functional currency. These currency risks are managed as a part of overall risk management strategy. There were no forward exchange contracts.

- Exposure to currency risk

PPIB's exposure to currency risk is as follows:

<table>
<thead>
<tr>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>(US Dollars in thousand)</td>
<td>(US Dollars in thousand)</td>
</tr>
<tr>
<td>Short term investments - amortized cost</td>
<td>7,660</td>
</tr>
<tr>
<td>Bank balances</td>
<td>17</td>
</tr>
<tr>
<td>Net exposure</td>
<td>7,677</td>
</tr>
</tbody>
</table>

The following significant exchange rates applied during the year:
Private Power and Infrastructure Board

ANNUAL REPORT

Rupess per USD

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average rate</td>
<td>166.13</td>
<td>142.70</td>
</tr>
<tr>
<td>Reporting rate</td>
<td>166.25</td>
<td>144.00</td>
</tr>
</tbody>
</table>

Sensitivity analysis

At 30 June 2020, if the currency had weakened / strengthened by 10% against USD dollar with all other variables held constant, the impact on profit before tax would have been Rupess 256.157 million (2019: Rupess 125.851 million) higher/lower.

(ii) Other price risk

Other price risk represents the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.

The Board’s investment is mutual fund amounting to Rupess 90.07 million (2019: Rupess 85.03 million) is exposed to price risk due to change in Net Asset Value (NAV) of such fund.

As at 30 June 2020, if fair value (NAV) had been 10% higher / lower with all other variables held constant, total comprehensive loss for the year would have been higher / lower by Rupess 9.07 million (2019: Rupess 8.03 million).

(iii) Interest rate risk

Interest rate risk represents the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Sensitivity to interest rate risk arises from mismatches of financial assets and liabilities that mature in a given period. A policy is adopted to ensure that interest rate risk is minimized by investing in fixed rate investments like PIBs and TDs. There were no borrowings.

Profile

At the reporting date the interest rate profile of variable rate interest-bearing financial instruments is:

2020 | 2019
---|---
Rupess in thousand
Investments | 1,399,883 | 1,749,897
Floating rate instruments
Financial assets
Investments | 1,399,883 | 1,749,897
Floating rate instruments
Financial assets
Bank balances | 146,654 | 103,663

Sensitivity analysis

If interest rate at the year end date, fluctuates by 1% higher / lower with all other variables held constant, profit for the year would have been Rupess 1.467 million (2019: Rupess 1.037 million) lower / higher, mainly as a result of higher / lower interest on floating rate financial instruments. This analysis is prepared assuming the amounts of financial instruments outstanding at balance sheet date were outstanding for the whole year.

(b) Credit risk

Credit risk represents the risk that one party to financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was as follows:

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td>1,889,949</td>
<td>1,839,531</td>
</tr>
<tr>
<td>Loans, advances and other receivables</td>
<td>140,792</td>
<td>133,880</td>
</tr>
<tr>
<td>Bank balances</td>
<td>146,654</td>
<td>103,663</td>
</tr>
<tr>
<td>Total</td>
<td>2,277,395</td>
<td>2,077,435</td>
</tr>
</tbody>
</table>

Geographically there is no concentration of credit risk as PPIB operates in the same geographical area.

The credit quality of financial assets that are neither past due nor impaired can be assessed by reference to external credit ratings (if available) or to historical information about counterparties default rate.

<table>
<thead>
<tr>
<th>Bank balances</th>
<th>Short term</th>
<th>Long term</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rupess in thousand</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Al-Baraka Bank (Pakistan) Limited</td>
<td>A1</td>
<td>A</td>
<td>PACRA</td>
</tr>
<tr>
<td>Dubai Islamic Bank Limited</td>
<td>A1</td>
<td>AA</td>
<td>VRS</td>
</tr>
<tr>
<td>National Bank of Pakistan</td>
<td>A1+</td>
<td>AAA</td>
<td>PACRA</td>
</tr>
<tr>
<td>Habib Bank Limited</td>
<td>A1+</td>
<td>AAA</td>
<td>VRS</td>
</tr>
<tr>
<td>Bank Alfalah Limited</td>
<td>A1+</td>
<td>AA+</td>
<td>PACRA</td>
</tr>
<tr>
<td>Habib Metropolitan Bank Limited</td>
<td>A1+</td>
<td>AA+</td>
<td>PACRA</td>
</tr>
<tr>
<td>United Bank Limited</td>
<td>A1+</td>
<td>AAA</td>
<td>VRS</td>
</tr>
<tr>
<td>FBL Bank Limited</td>
<td>A1+</td>
<td>AA-</td>
<td>PACRA</td>
</tr>
<tr>
<td>Summit Bank Limited</td>
<td>A3</td>
<td>BBB-</td>
<td>VRS</td>
</tr>
<tr>
<td>Standard Chartered Bank (Pakistan) Limited</td>
<td>A1+</td>
<td>AAA</td>
<td>PACRA</td>
</tr>
<tr>
<td>Askari Bank Limited</td>
<td>A1+</td>
<td>AA+</td>
<td>PACRA</td>
</tr>
<tr>
<td>JS Bank Limited</td>
<td>A1+</td>
<td>AA-</td>
<td>PACRA</td>
</tr>
<tr>
<td>Faysal Bank Limited</td>
<td>A1+</td>
<td>AA+</td>
<td>PACRA</td>
</tr>
<tr>
<td>MCB Bank Limited</td>
<td>A1+</td>
<td>AAA</td>
<td>PACRA</td>
</tr>
<tr>
<td>Meezan Bank Limited</td>
<td>A1+</td>
<td>AA-</td>
<td>PACRA</td>
</tr>
<tr>
<td>First Women Bank Limited</td>
<td>A2</td>
<td>AA-</td>
<td>PACRA</td>
</tr>
<tr>
<td>Total</td>
<td>146,654</td>
<td>103,663</td>
<td></td>
</tr>
</tbody>
</table>

Investments

<table>
<thead>
<tr>
<th>Term deposit receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faysal Bank Limited</td>
</tr>
<tr>
<td>Habib Metropolitan Bank Limited</td>
</tr>
<tr>
<td>JS Bank Limited</td>
</tr>
<tr>
<td>Pak Omen Investment Company Limited</td>
</tr>
<tr>
<td>Pak Bruz Bank Investment Company Limited</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Due to the Board’s long standing business relationships with these counter parties and after giving due consideration to their strong financial standing, management does not expect non-performance by these counter parties on their obligations to the Board. Accordingly the credit risk is minimal.
(c) Liquidity risk

Liquidity risk is the risk that PP&IB will not be able to meet its financial obligations as they fall due. PP&IB's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to its reputation.

PP&IB follows a cost-effective cash management and planning policy to ensure availability of funds and to take measures for new requirements.

The maturity profile of PP&IB's financial liabilities based on the contractual amounts is as follows:

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carrying amount</td>
<td>Carrying amount</td>
</tr>
<tr>
<td></td>
<td>Contractual cash flows (within one year)</td>
<td>Contractual cash flows (within one year)</td>
</tr>
<tr>
<td>Provision against performance guarantees envisaged</td>
<td>846,731</td>
<td>846,731</td>
</tr>
<tr>
<td>Other payables having maturity up to one year</td>
<td>21,612</td>
<td>21,612</td>
</tr>
<tr>
<td></td>
<td>868,343</td>
<td>868,343</td>
</tr>
</tbody>
</table>

(Rupees in thousand)

30 FINANCIAL INSTRUMENTS

30.1 Financial assets and liabilities

30 June 2020

<table>
<thead>
<tr>
<th>Financial assets:</th>
<th>Amortized cost</th>
<th>PVOCI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity up to one year</td>
<td>94,521</td>
<td>-</td>
<td>94,521</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>1,749,957</td>
<td>-</td>
<td>1,749,957</td>
</tr>
<tr>
<td>Cash and bank balances</td>
<td>163,872</td>
<td>-</td>
<td>163,872</td>
</tr>
<tr>
<td>Equity</td>
<td>85,034</td>
<td>85,034</td>
<td></td>
</tr>
<tr>
<td>Long-term investments</td>
<td>39,319</td>
<td>39,319</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,077,640</td>
<td>85,034</td>
<td>99,074</td>
</tr>
</tbody>
</table>

(Rupees in thousand)

30 June 2019

<table>
<thead>
<tr>
<th>Financial assets:</th>
<th>Amortized cost</th>
<th>PVOCI</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity up to one year</td>
<td>94,521</td>
<td>-</td>
<td>94,521</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>1,749,957</td>
<td>-</td>
<td>1,749,957</td>
</tr>
<tr>
<td>Cash and bank balances</td>
<td>163,872</td>
<td>-</td>
<td>163,872</td>
</tr>
<tr>
<td>Equity</td>
<td>85,034</td>
<td>85,034</td>
<td></td>
</tr>
<tr>
<td>Long-term investments</td>
<td>39,319</td>
<td>39,319</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,077,640</td>
<td>85,034</td>
<td>99,074</td>
</tr>
</tbody>
</table>

(Rupees in thousand)

30.2 Fair value of financial instruments

The carrying value of all financial assets and liabilities reflected in the financial statements approximates their fair values except for certain financial assets which are carried at amortized cost whose fair value in comparison with carrying amount is as follows:

<table>
<thead>
<tr>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying amount</td>
<td>Fair Value</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Assets carried at amortized cost</td>
<td></td>
</tr>
<tr>
<td>Short term investments</td>
<td>1,986,883</td>
</tr>
<tr>
<td>The basis for determining fair values is as follows:</td>
<td></td>
</tr>
<tr>
<td>Interest rates used for determining the fair value</td>
<td>The interest rates used to discount estimated cash flows, when applicable, are based on the government yield curve at the reporting date plus an adequate credit spread.</td>
</tr>
</tbody>
</table>

30.3 Fair value hierarchy

Judgments and estimates are made in determining the fair values of the financial instruments that are recognized and measured at fair value in the financial statements. To provide an indication about the reliability of the inputs used in determining fair value, the Board has classified its financial instruments into the following three levels. An explanation of each level follows underneath the table.

30 June 2020

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets carried at fair value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair value through other comprehensive income</td>
<td>99,066</td>
<td>-</td>
<td>99,066</td>
</tr>
</tbody>
</table>

30 June 2019

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets carried at fair value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair value through other comprehensive income</td>
<td>85,034</td>
<td>-</td>
<td>85,034</td>
</tr>
</tbody>
</table>

The carrying value of the financial assets and liabilities reflected in the financial statements approximates their respective fair values.

The above table does not include fair value information for financial assets and financial liabilities not measured at fair value if the carrying amounts are a reasonable approximation of fair value. Due to short-term nature, carrying amounts of certain financial assets and financial liabilities are considered to be the same as their fair value.

There were no transfers between levels 1 and 2 for recurring fair value measurements during the year. Further, there was no transfer in and out of level 3 measurements as the Board has no investments which are classified under level 3 of fair value hierarchy table.

The Board's policy is to recognize transfers into and out of fair value hierarchy levels as at the end of the reporting period.

Level 1: The fair value of financial instruments traded in active markets (such as publicly traded derivatives, and trading and available-for-sale securities) is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the Board is the current bid price. These instruments are included in level 1.
Level 2: The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using valuation techniques which maximize the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity securities.

30.5 Valuation techniques used to determine fair values
Specific valuation techniques used to value financial instruments include the use of quoted market prices.

31 DATE OF AUTHORIZATION
These financial statements were approved on 04 JUN 2021 by the Board members of PPIB.

32 CORRESPONDING FIGURES
No significant reclassification have been made in corresponding figures.

33 GENERAL
Figures have been rounded off to the nearest thousand of Rupees unless stated otherwise.

MANAGING DIRECTOR

BOARD MEMBER