



IPDF

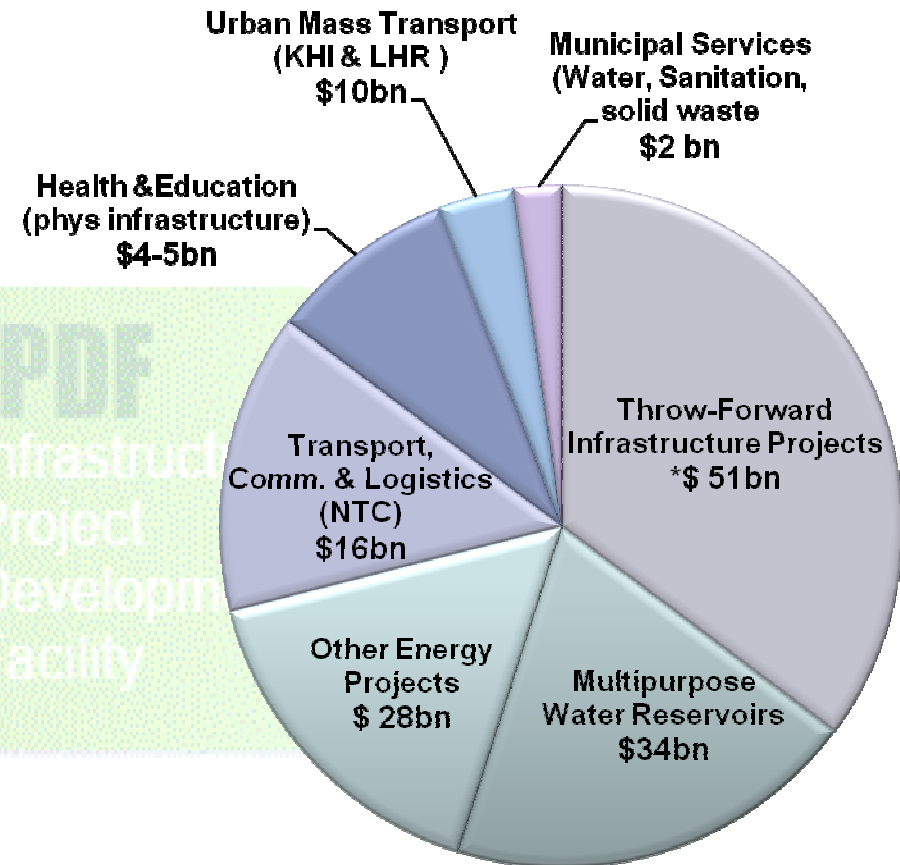


## Public Private Partnership (PPP) Program of Pakistan Investment Opportunities

Presentation for Pak-Afghan Summit

# The Need – Infrastructure Challenge Facing GOP

- Total last year PSDP spending on infrastructure **USD 3 Bln.**
- Total 5 year requirement on infrastructure **USD185 Bln. or USD 37 Bln./yr**
- The huge gap can only be bridged through sustained private sector participation



\* Includes Maintenance backlog of \$10 bn

# Infrastructure Project Development Facility (IPDF)

## Unit of GOP

- IPDF is the central PPP unit of the GOP, incorporated by MOF to facilitate government departments/agencies in developing their infrastructure projects under PPP methodology

## Inception

- Launched by Prime Minister to act as a bridge between public & private sectors by facilitating infrastructure development under PPP methodology

## Role of IPDF

- Facilitate the preparation of PPP transactions & the promotion, generation & implementation of PPP projects

## Sectors

- Transport & logistics, Mass Urban public transport, municipal services, social sector, energy, etc.



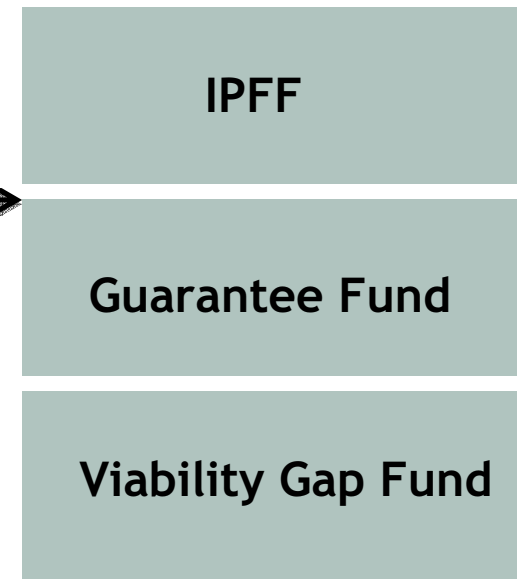
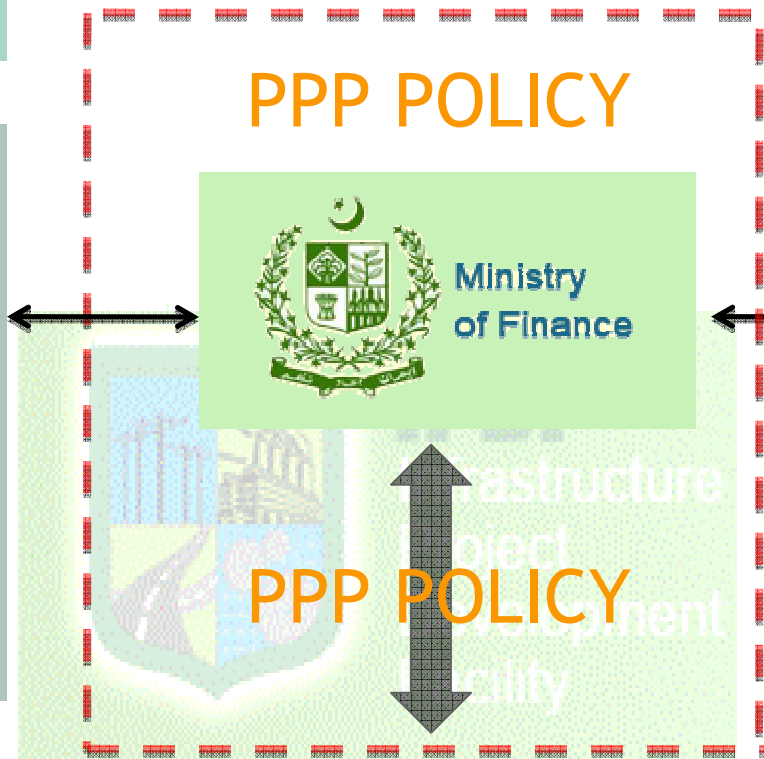
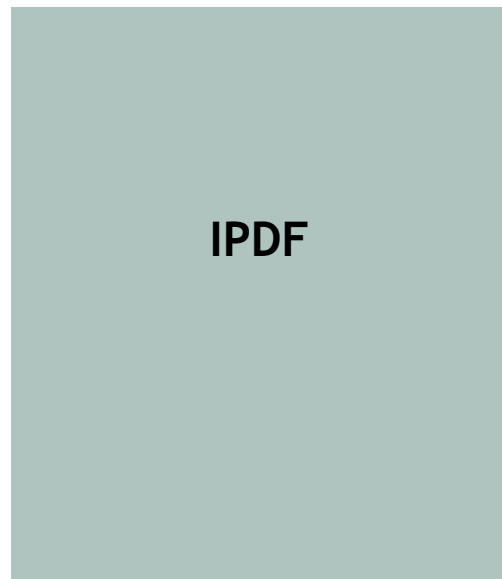
MINISTRY OF FINANCE  
GOVERNMENT OF PAKISTAN



# Pakistan's PPP Program — Overall Structure

Project Development

Project Financing



Task Force on Public Private Partnerships (PPP)

Policy & Law

Standard Provisions

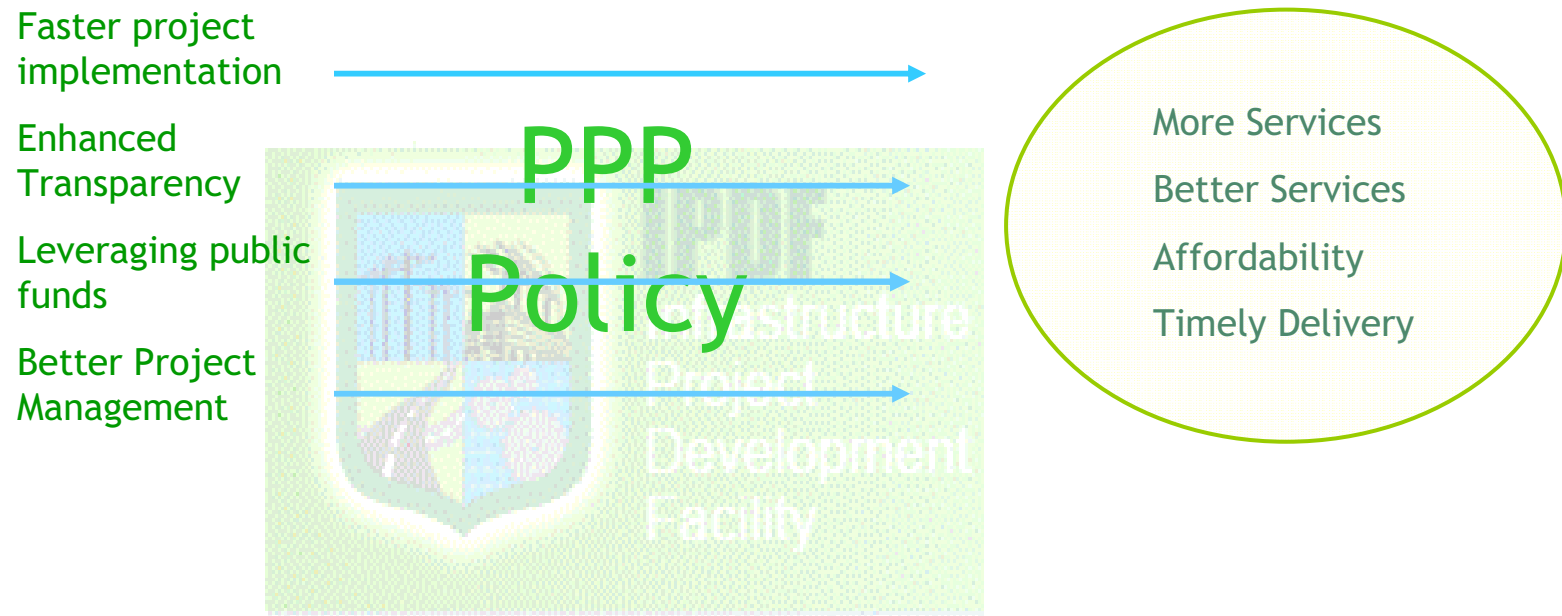
VGF

Risk Management

# IPDF Institutional Capacity Building - Guidelines and Standardized Documents

- Project Inception Guidelines
- Project Preparation & Feasibility Guidelines
- Project Procurement Guidelines
- Viability Gap Funding Guidelines & Instructions
- Risk Management Framework
- Economic Cost-Benefit Guidelines
- Environment & Social Guidelines
- PPP Standardized Contractual Provisions on Annuity model
- PPP Standardized Contractual Provisions on User Pay model

# PPP Policy 2010 Objectives



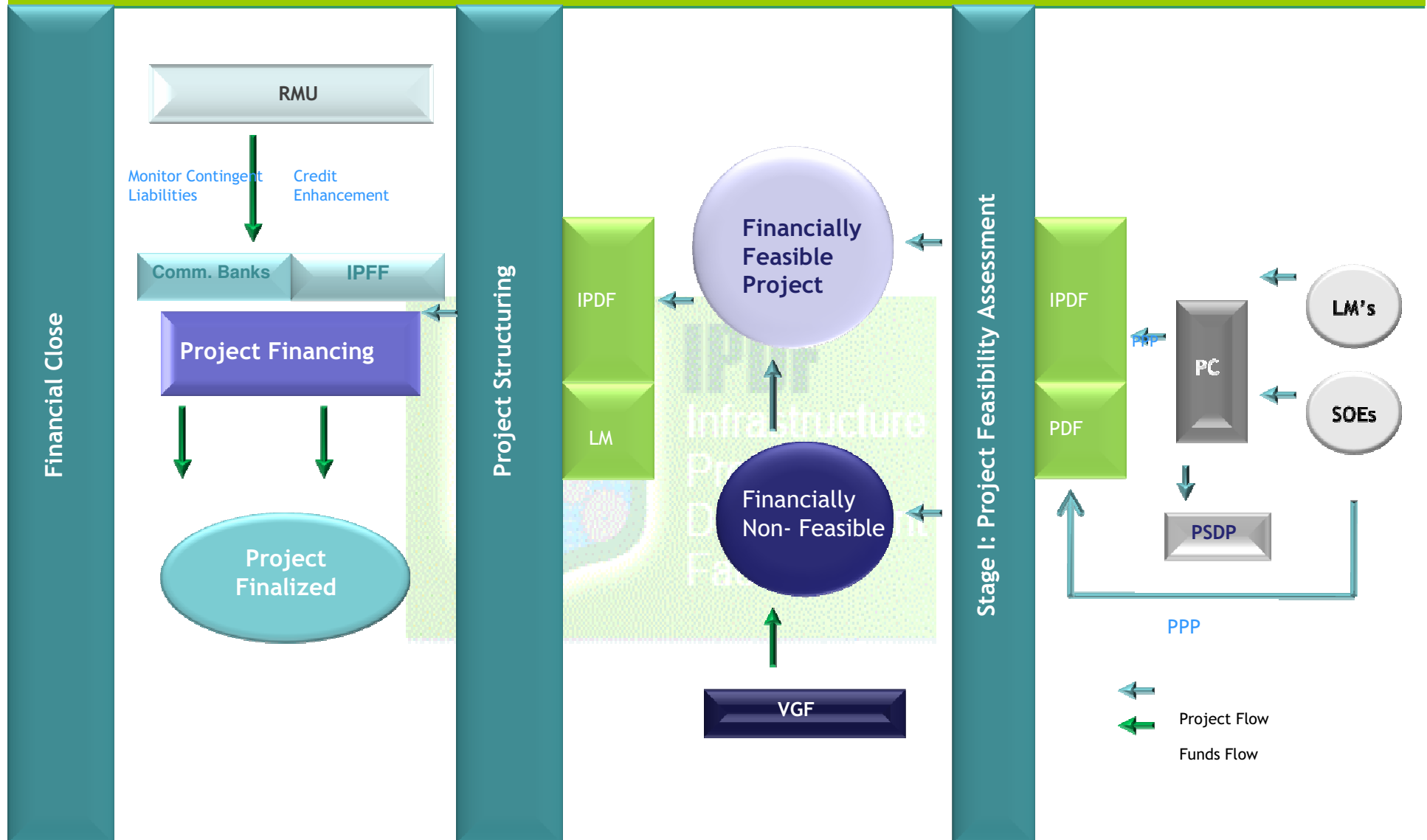
# PPP Policy 2010 Objectives

- Provides a comprehensive guideline to develop and implement infrastructure projects transparently under PPP modality
- Develops institutional support to PPP structures
- Promotes inclusive social and economic development through infrastructure provisioning
- Creates an enabling economic environment to encourage private investment
- Protects the interests of all stakeholders
- Sets up **efficient** and **transparent** institutional arrangements for identification and development of projects
- Provide risk management framework
- Provides mechanisms for various funding options available for pertinent infrastructure projects
- Under the PPP policy, IPDF is tasked to provide easy and timely access for institutions and to ensure that viable good quality PPP deals are concluded in a timely manner

# Legal and Regulatory Framework

- Federal PPP Law to be introduced this year
- First draft has been finalized
  - Establishes the function of the Federal Government and responsibilities of the implementing agencies
  - Provides legal protection to all stakeholders
  - Develops clear legal framework for private sector investment in PPP projects - consistent with existing national and international regulatory practices
- Until enactment of Federal PPP Law, all Federal PPP projects will be governed by contract law
- **Punjab Public Private Partnership for Infrastructure Act 2010** already in place based on first draft of Federal PPP law
- Sindh PPP law also enacted

# Financial & Institutional Framework



# IPDF Project Pipeline (USD. 4 Billion)

## Transport and Logistics Sector

- PHDEC- NTC Cool Chain Project [USD.141 Mln](#)
- KMTC- Karachi CNG Bus Project [USD.30 Mln](#)
- KUTC- Karachi Circular Railway [USD. 1.6 Bln](#)
- N.H.A- Habibabad Flyover [USD. 7 Mln](#)
- Railways Track Access Project [USD. 240 Mln](#)
- Revival of Sind Engineering
- CAA - Fuel Farm & Hydrant Refueling System [USD. 10 Mln](#)
- CAA - Captive Power Plant at New BBIA [USD. 30 Mln](#)

## Health Sector

- PIMS - National Institute of Dentistry (NID) [USD.16 Mln](#)
- PIMS- Center for Liver and Organ Transplant (CLOT) [USD. 15 Mln](#)

# IPDF Project Pipeline (USD. 4 Billion)

## Education Sector

- COMSATS - Student Hostel Facility Construction [USD. 6 Mln](#)

## Hydro-Power Sector

- Lower Spat Gah (496 MW) [USD. 1 Bln](#)
- Lower Palas Valley (665 MW) [USD. 1.18 Bln](#)

## Other Projects

- CDGF- Faisalabad Refuse Derived Fuel [USD.15 Mln](#)
- Islamabad Solid Waste Management [USD. 8 Mln](#)
- Lahore- Southern Bypass [USD. 62 Mln](#)
- Faisalabad Slaughter House
- Vehicle Inspection and Certification System

# Track Access Project

## Project Scope

IPDF is assisting Pakistan Railways in feasibility and structuring of Track Access Project

Private operator(s) to operate freight and passenger trains on the Track of Pakistan Railways

Private operator will pay the relevant **Track Access Charge** to Pakistan Railways for utilizing its infrastructure

## Project Highlights

The products for which the financial model has been made includes transportation of oil, general cargo, container cargo, rock phosphate, coal and cement

Total project cost of around USD. 240 million. The project is to be done on the basis of **FOOT** (Finance, Own, Operate and Transfer)

# Track Access Project

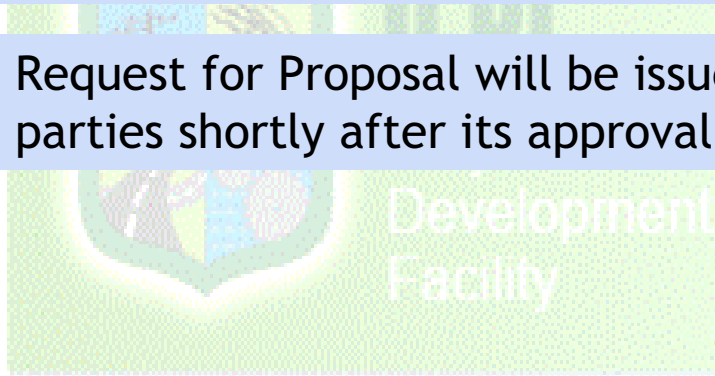
## Financial Highlights

Internal Rate of Return (IRR) - 22%  
Project Net Present Value (NPV) - USD. 235 million  
Payback period - 5-6 years

## Project Update

Expression of Interest has already been floated in the market. Sixteen local and international parties submitted their proposals

Request for Proposal will be issued to the prequalified parties shortly after its approval from PR



# Karachi Circular Railway

## Project Scope

IPDF is assisting City District Government Karachi (CDGK) (PIMS) in a Karachi based urban rail transit project

## Project Highlights

The project aims to cater to 698,955 passengers/ day

The track length for KCR is envisioned to be 43.1 Km

Total project cost is USD. 1.58 Bln.



The project is being funded through a USD. 1.44 Bln. loan from the Japanese International Cooperation Agency (JICA). The terms of the STEP loan comprise 0.20% Interest rate, payable in 40 years inclusive of a 10-year grace period. IPDF presented the financial feasibility to ECNEC in September, 2009. Subsequently the project was approved. GOP is evaluating options to structure the loan so that it doesn't result in burdening the sovereign balance sheet.

# Faisalabad Refuse Derived Fuel (RDF)

## Project Scope

IPDF is assisting CDGF in the establishment of a Refuse Derived Fuel (RDF) system

## Project Highlights

Four towns are covered; Jinnah, Lyallpur, Madina and Iqbal Town. They produce around 1,250 tons of municipal solid waste.

Total project cost is around USD. 15 million.

The project is to be done on Design, Build, Finance and Operate (DBFO) basis.

## Financial Highlights

Project Value (Internal Rate of Return (IRR) - 22.3%

Project Net Present Value NPV) - USD. 4 million

Payback period - 6 years

## Project Update

12 major corporate houses participated in the prequalification.

Request for Proposal has been approved by the Punjab PPP Steering Committee and would be floated in the market to the prequalified parties shortly.

# Fuel Farm and Hydrant Refueling System

## Project Scope

IPDF is assisting Pakistan Civil Aviation Authority (CAA) in Establishment of Fuel Farms and Operation & Maintenance of Hydrant Refueling System on Public Private Partnership (PPP) Basis at New Benazir Bhutto International Airport (BBIA), Islamabad.

## Project Highlights

Private operator will build fuel farms for storage and dispensing of aviation fuel and petrochemical products at the new BBIA on Design, Build, Finance Operate and Transfer (DBFOT) basis.

Further, the party establishing Fuel Farms shall also Operate and Maintain (O&M) Hydrant Refueling System (HRS).

## Project Update

Request for Qualification (RFQ) has been floated in local and international news papers . Feasibility is also being undertaken. IPDF is also contacting local and international investors to pitch this project.

# Captive Power Plant at New BBIAP

## Project Scope

New Benazir Bhutto International Airport is expected to be operational by the June 2013. The airport's electricity (power) requirements are expected to be about 25 MW

CAA wants construction, operation and maintenance of captive power plant within the airport premises. IPDF has been awarded the mandate to explore and implement captive power generation on PPP modality

## Project Highlights

IPDF is also exploring options for alternative sources of energy for the captive power plant.

The project cost is estimated at USD 30 million.

The project will be developed under the Build, Own, Operate and Transfer (BOOT) modality with a concession period of 25 years.

## Project Update

We have started carrying out technical study and developing tariff model in-house. The study is expected to be completed by June.

# Karachi CNG Buses

## Project Scope

The CNG Bus initiative has been launched in Karachi in collaboration with the Govt. of Sindh and the City District Government of Karachi by inducting 4,000 environment friendly dedicated CNG buses within the next five years in a phased program.

## Project Highlights

In the phase-I of the project 500-1000 CNG buses would be introduced.  
The project cost is estimated at USD. 30 million.  
The project will be developed under the Build, Own, Operate (BOO) modality with a concession period of 10 years.

## Financial Highlights

Project Internal Rate of Return (IRR) - 36.7%

## Project Status

Negotiations are underway between National Bank of Pakistan and prospective bus operators. IPDF has supported the proposal of M/s Panda, who is interested in bringing 800 CNG buses in Karachi.

# Revival of Sind Engineering (Pvt.) Ltd

## Project Scope

IPDF is assisting Sind Engineering in revival of its facility and operations under PPP modality.

## Project Update

A Technical Advisor has been hired and the project feasibility is being prepared.

The draft of the feasibility will be ready by first week of May 2011.

The technical feasibility will be used as a basis for structuring the project on PPP modality.

# National Trade Corridor Cool Chain

## Project Scope

IPDF in collaboration with PHDEC is structuring the NTC project to Improve the post harvest management infrastructure for horticulture products.

## Project Highlights

The project is to be established as a Common Facility Centre (CFC) across NTC that includes: 39 Export/Pack Houses, 23 Cold Storages, 2 Reefer Yards, 6 Testing Labs. Total project cost is approx. USD.141 million

## Financial Highlights

### Punjab/N.W.F.P Region

- Project NPV - USD. 80 million
- Project Internal Rate of Return (IRR) - 34%
- Payback Period - 6.1 Years

### Sindh/Baluchistan Region

- Project Net Present Value (NPV) - USD. 8 million
- Project Internal Rate of Return (IRR) - 38%
- Payback Period - 5.6 Years

## Project Update

Feasibility has been approved. The PC-1 has been submitted to Planning Commission for approval.

# Habibabad Flyover Project

## Project Scope

IPDF in collaboration with National Highway Authority (NHA) is working over this flyover to select suitable option that may improve its poor geometry and cater for other structural issues.

## Project Highlights

Habibabad Flyover (Wan Radha Ram) is located on the main Grand Trunk Road (N-5).  
NHA has selected an option to operate the existing bridge as three (3) lanes after strengthening and then construction of three (3) additional lanes in parallel  
Total cost of the projects is estimated at USD. 7 Million

## Financial Highlights

Projected IRR is 27.71%  
Pay Back period is 3 years

## Project Update

Financial model has been developed.  
Final Feasibility to be submitted by the TA.

# Lahore Southern Bypass

## Project Scope

The Urban Unit, P & D Department, Government of Punjab and TEPA plan to construct the 7 km link of the Southern bypass road from College Road intersection to Ferozpur road intersection.

## Project Highlights

This road link, which will be 7 km and have a 3-lane dual carriageway, will offer the traffic from Kasur and Thokar Niaz Beg a convenient and faster route.

The project cost is estimated at USD 62 million.

The project will be developed on the Build, Own, Transfer (BOT) Modality with a concession period of 20 years.

## Financial Highlights

Project Internal Rate of Return (IRR) - 30.79%

Payback period - 4 years

## Project Update

A Request for Qualification (RFQ) was issued and 4 parties have been prequalified by the Evaluation committee. The Request for Proposal (RFP) will be issued to prequalified parties.

# National Institute of Dentistry

## Project Scope

IPDF is assisting Pakistan Institute of Medical Sciences (PIMS) in establishing a state-of-the-art dental institute within its premises.

## Project Highlights

Built on an area of approximately 45,000 sq ft, the institute will train 100 undergraduate and 40 graduate students.

The project cost is around USD. 16 million.

The project is envisaged to be structured on 'Design, Build, Finance and Operate' (DBFO) basis.

## Financial Highlights

Project Internal Rate of Return (IRR) - 20%

Project Net Present Value (NPV) - USD. 4 million

Payback period - 7 years

## Project Update

The technical and financial feasibilities have been completed.

Request for Qualification (RFQ) was advertised and five parties have submitted proposals.

# Centre for Liver Diseases & Organ Transplant

## Project Scope

IPDF is assisting Pakistan Institute of Medical Sciences (PIMS) in establishing a state-of-the-art liver transplant centre within its premises

## Project Highlights

The project is envisioned to be constructed on Build Operate Transfer (BOT) basis with a concession period of 25 years.  
A 'CLOT Fund' will be created to subsidize treatment for poor patients.  
The total project cost is estimated to be around USD 11 million.

## Project Update

The technical and financial feasibility is being finalized. Request for Qualification is being drafted in consultation with representatives of PIMS and Ministry of Health.

# CIIT Hostel & Food Court

## Project Scope

IPDF is assisting COMSATS Institute of Information Technology (CIIT) in developing hostels and a food court for 800 students at COMSATS Campus in Islamabad.

## Project Highlights

The project is structured on Build Finance Own and Transfer (BFOT) modality, where COMSATS will make fixed installments to Private Party.

The project cost is estimated to be USD. 6 million.

Concession of 11 years, after which ownership of facility will transfer to COMSATS.

## Project Update

Request for Qualification (RFQ) has been issued and pre-qualified parties will be issued Request for Proposal (RFP).



# Faisalabad Slaughter House

## Project Scope

CDGF intends to Establish a modern multi facility slaughter house on PPP basis in Faisalabad

The project aims to provide hygienic slaughtering facilities for small and large animals including safe disposal of waste

CDGF has acquired 13 acres land for the development of the facility

## Project Status

IPDF has been requested to undertake the transaction structuring for the project

NESPAK has been short listed to provide technical advisory services on the project

# Vehicle Inspection & Certification System (VICS)

## Project Scope

- Department of Transport (GoPb) intends to develop a Vehicle Inspection and Certification System for Public Sector Vehicles
- The objectives of the project are to test road fitness of vehicles & control vehicle emissions beyond acceptable limits
- In the first phase the project is intended to be implemented on pilot basis in 5 major cities of Punjab
- The project is envisaged to be a part of the larger scheme designed to include all forms of vehicles

## Project Update

- IPDF on the request of DoT advertised the project for Transaction Advisory Services
- Significant interest was shown by both local and international firms specializing in the sector (11 proposals)
- Technical & financial evaluation of advisory firms has been completed

# Heavy Industries Taxila

## Project Scope

IPDF is assisting Heavy Industries Taxila in manufacturing of 360 HP/PS prime movers

Private operator (Master Dealers) will get the territorial rights to market and appoint dealership network

Private operator will guarantee a predetermined number of prime movers that would be sold per annum

## Project Highlights

In the first phase, market study was carried out to assess and evaluate potential for the indigenous manufacturing of prime movers

Study revealed that while the demand is influenced by many factors (trucking policy, transit trade agreements, opening of trade corridors, etc), there was demand for prime movers in 360 HP/PS. The project has been structured. RFQ has been forwarded to HIT for approval and subsequent advertisement.

# Hydro-Power Projects

PROJECT DETAILS - ANALYSES PARAMETERS		
	LOWER SPAT GAH	LOWER PALAS VALLEY
Location	Kohistan	Kohistan
PLANT CAPACITY	496 MW	665 MW
PLANT FACTOR	46.20 %	44.46 %
SALEABLE ENERGY	2,007 GWh	2,590 GWh
CONSTRUCTION PERIOD	5 Years	5 Years
CONCESSION PERIOD	30 Years	30 Years
ANNUAL AVOIDED CO <sub>2</sub>	923,291 tons	1,191,388 tons
INTEREST RATE (DOMESTIC)	16.43%	16.43%
INTEREST RATE (FOREIGN)	4.5%	4.5%
Levelized Tariff (Cents/kwh)	8.31	7.63
TOTAL PROJECT COST	1,047.84 US\$ MILL	1,184.16 US\$ MILL

# Hydro-Power Projects

## Work Carried out by IPDF

- Development of a viable financial structure has been the key challenge
- Key tasks for arriving at a viable structure include:
  - Detailed Review of the Project 'Cost Structure' and 'Revenue Stream' including CDM benefits
  - Development of Financial Model and Project Cost Indexation
  - Incorporation of Unaccounted for items e.g. Debt Arrangement Costs
  - Project Cost Optimization under various scenarios
  - Project Optimization under various Financing Structures
- A robust financial model has been developed with built in flexibility to test the project under various scenarios
- RFP and documents being developed

# Potential Projects, CDA

## Project Pipeline

CDA has requested IPDF's assistance for the development of following project on PPP modality:

- Bus Rapid Transit System for Rawalpindi & Islamabad
- Solid Waste Management
- Widening of IJP Road
- Mass Transit System for Rawalpindi & Islamabad
- Widening of Islamabad Highway from Kural to Rawat

## Project Update

Meetings with Senior officials from RDA & CDA have been conducted at IPDF to chalk a way forward for transport projects

Solid Waste Study for Islamabad has been advertised

# Potential Projects

## Project Pipeline

- IPDF has been approached by a number of Government Agencies (GAs') to facilitate on projects
- Projects identified by GAs' include:
  - Rawalpindi Express Way (RDA)
  - Rawalpindi Bypass (RDA)
  - Theme parks (PBIT)
  - Multi-Modal Bus Terminals in Lahore (PPP Cell Punjab)
  - Islamabad - Rawalpindi Mono-Rail (CDA/RDA)
  - Railways Station Development for Pakistan Railways Rawalpindi division (PR)
  - Cargo Village at New BBIA, Islamabad (CAA)

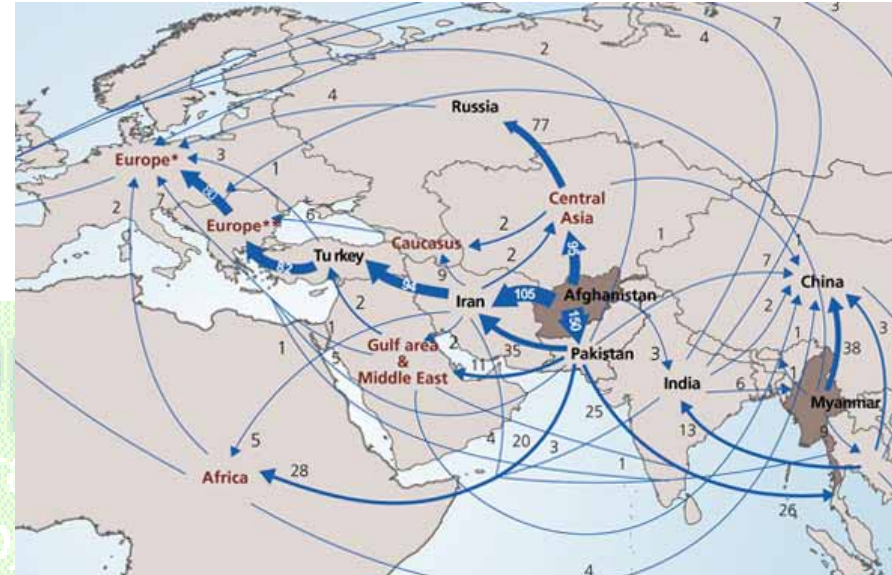
# Pak-Afghan Trade Relationship

- Afghanistan has traditionally relied on Pakistan as its main trading partner. According to official Afghan statistics in 2008, **36% of its imports and 17% of its exports are with Pakistan.**
- In the financial year 2010, Pakistan's exports to Afghanistan reached US\$ 1.2 billion. For 2011, **Pakistan is hoping to export goods worth US\$ 1.7 billion** and is well on course to achieve this figure as the exports in the six month period from July 2010 to January 2011 have already reached US\$ 875 milliones.



# PPP and Trade Promotion

- The **trade relationship between Pakistan and Afghanistan is essential** as Pakistan provides Afghanistan with a direct route to sea and Afghanistan serves Pakistan's need of an overland route to trade with the Central Asian states.



- Transit to Afghanistan through Pakistan is currently broadly governed by the **1965 Afghan Transit Trade Agreement (ATTA)** which specifies the port, route, transport modes and customs transit procedure
- Among Pakistan's major export sectors, the **main area of concern is transport, infrastructure and logistics** that need the most attention to improve trade
- Keeping in view Government budget constraints, **Public Private Partnership can play a very significant role in developing infrastructure for trade promotion**

# PPP and Trade Promotion

- IPDF is structuring PPP projects, such as the Railways Track Access Project and the NTC Cool Chain Project, to build infrastructure that is essential to promoting regional trade.
- The **NTC Cool Chain Project** will lead to the improvement of post harvest losses and greater trade facilitation along the National Trade Corridor linking Afghanistan, China, Iran and Central Asian Republics
- The **Railways Track Access Project** will lead to the development of track route to Afghanistan that will help in facilitating two trains per day for goods in transit to Afghanistan.
- Currently goods are transported via Road Transportation through containers
- GITA train will facilitate in carrying **1.3 Million Tonnes** of Goods to Afghanistan
- Transportation via train is more **secure** and has a **faster turn-round** time as compared to Road