Pakistan Portfolio

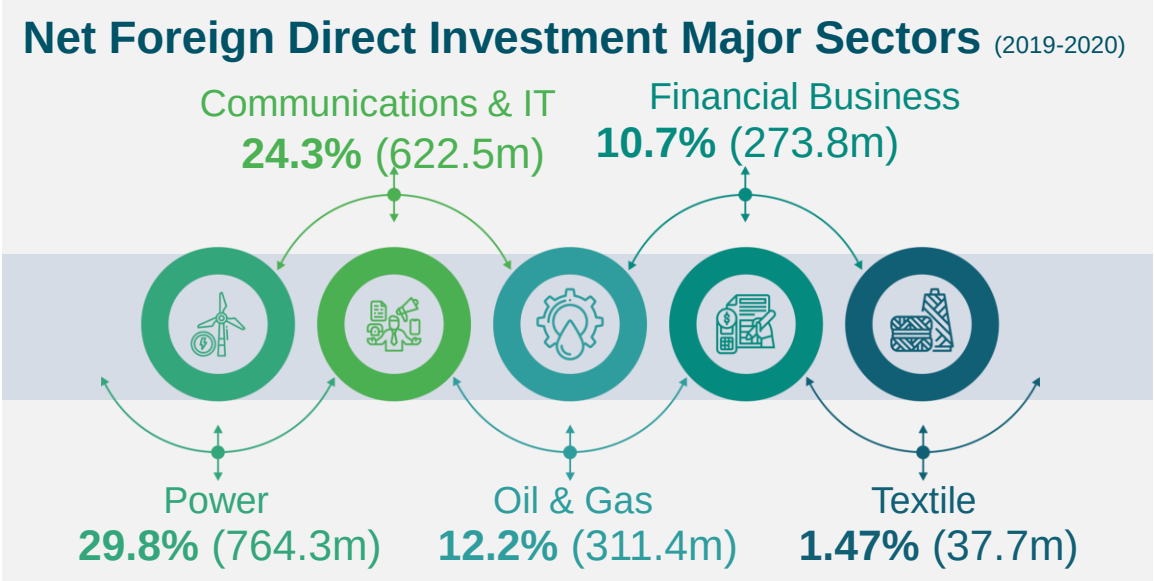
SDGs Investment Fair

14 APRIL- 2021

Pakistan Profile

- Achieved macro-economic stability: aiming for post COVID-19 economic recovery.
- Projected to approach upper middle-income status, with declining poverty rate, lowered inequality and better HDI ranking.
- National poverty headcount ratio declined from 6.1% in 2013-14 to 3.9% in 2015-16.
- Among top ten best reformers in the World Bank's Ease of Doing Business Index 2020.
- Estimated private investment needs of $96.2 billion in infrastructure related SDGs makes Pakistan an attractive destination for FDI.
- Gradual increase in investment to GDP ratio required from 15% to 25% to achieve sustainable growth.
- Risk mitigation: COVID-19 has increased the number of people living below the poverty line to approx. 50 million (25% of population). Hence, immediate need for SDG investments to prevent reversal of recent economic gains.

A Frontier Market Ripe for Growth



41,726,683
GDP* (million PKR) (million US$)

256,795
(1USD=PKR162.49)

9.1%
Inflation Rate (March 2021)

15.4%
Investment to GDP Ratio

2,561.2
FDI* Net (million USD)

2.0
Post-COVID GDP Projection

12.9
Total Revenue (% of GDP) (2019)

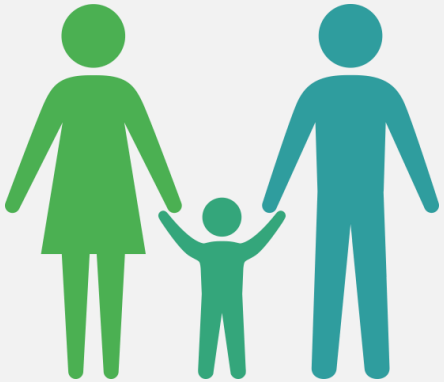
11.8
Tax Revenue (% of GDP) (2019)

3.2
Total Dev. Expenditure & net lending (% of GDP) (2019)

Pakistan Economic Survey 2019-20

Demographic Dividends as Force Multiplier

Total Population



211.17 m

Youth Population

Under 29 years
67.6%

Between 15-29 years
26.8%

Mobile Subscribers
Over180
million

Teledensity
84.04%
(Jan 2021)

Workforce Population
65.5 m

Youth Employment to Pop Ratio
42.30

Languages
Urdu (Official)
English (Official)

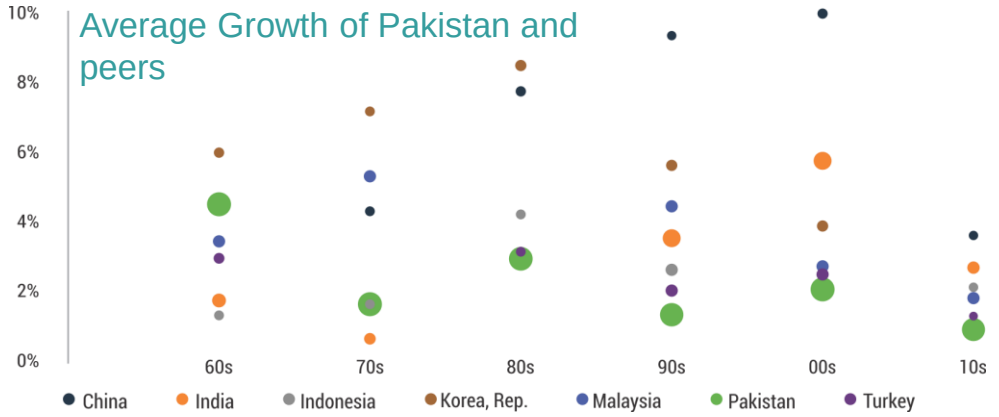
Land Area
796,096
sq. km

Internet Subscribers
100 million
(April 2021)

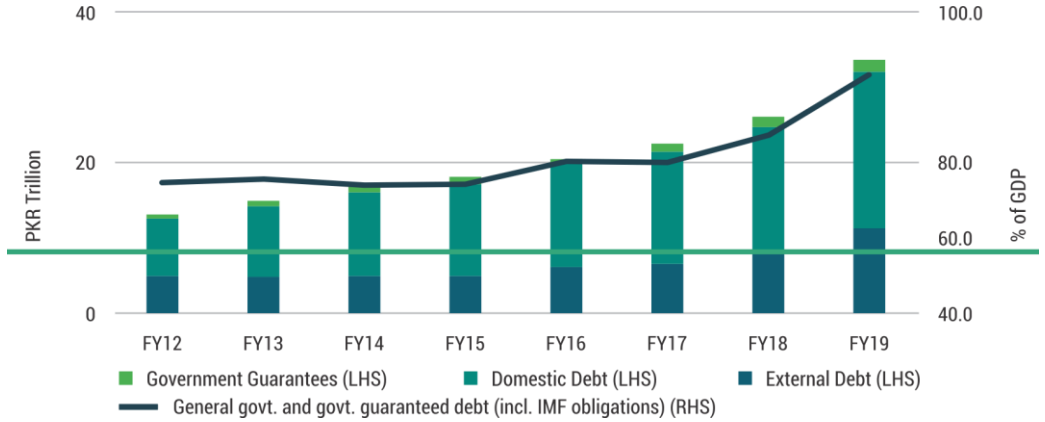
Pakistan Economic Survey 2019-20; Labour Force Survey 2017-18; Pakistan Telecommunication Authority.

Continued Fiscal Constraint

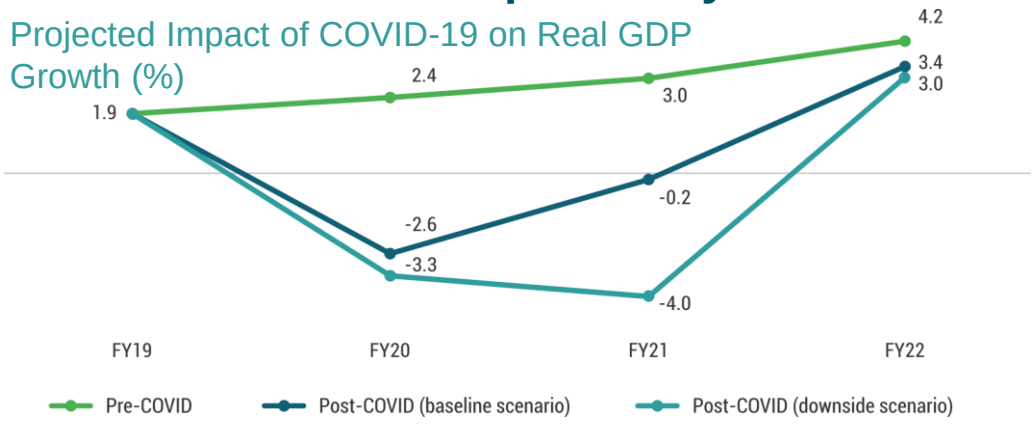
Pakistan average growth is low



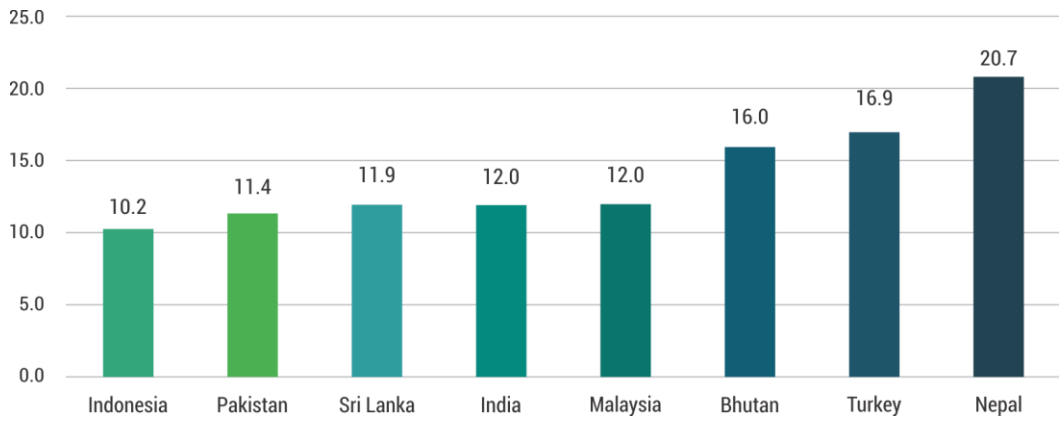
Public debt continues to increase



And will be further impacted by COVID-19



Tax revenue is low



Source: World Development Indicators, 2017-2020

Pakistan's Growth Vision 2025

Rebuild Institutions

Inclusive Growth

Enhance Competitiveness

Green Economy

Jobs for Youth

Top 5 Reasons to Invest in Pakistan

1

Large market of over **200m +**

3

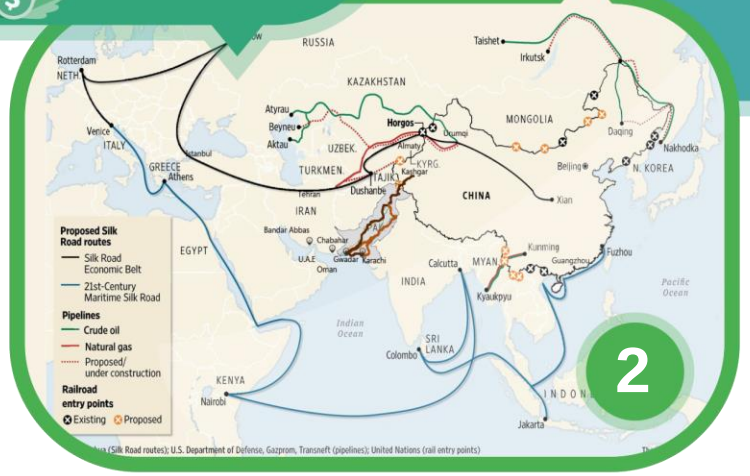
Highest corporate profitability in emerging markets

Rose 39% as compared to 2019

5

Developed financial market and favorable investment regulations

Regional connectivity with China, West & Central Asia

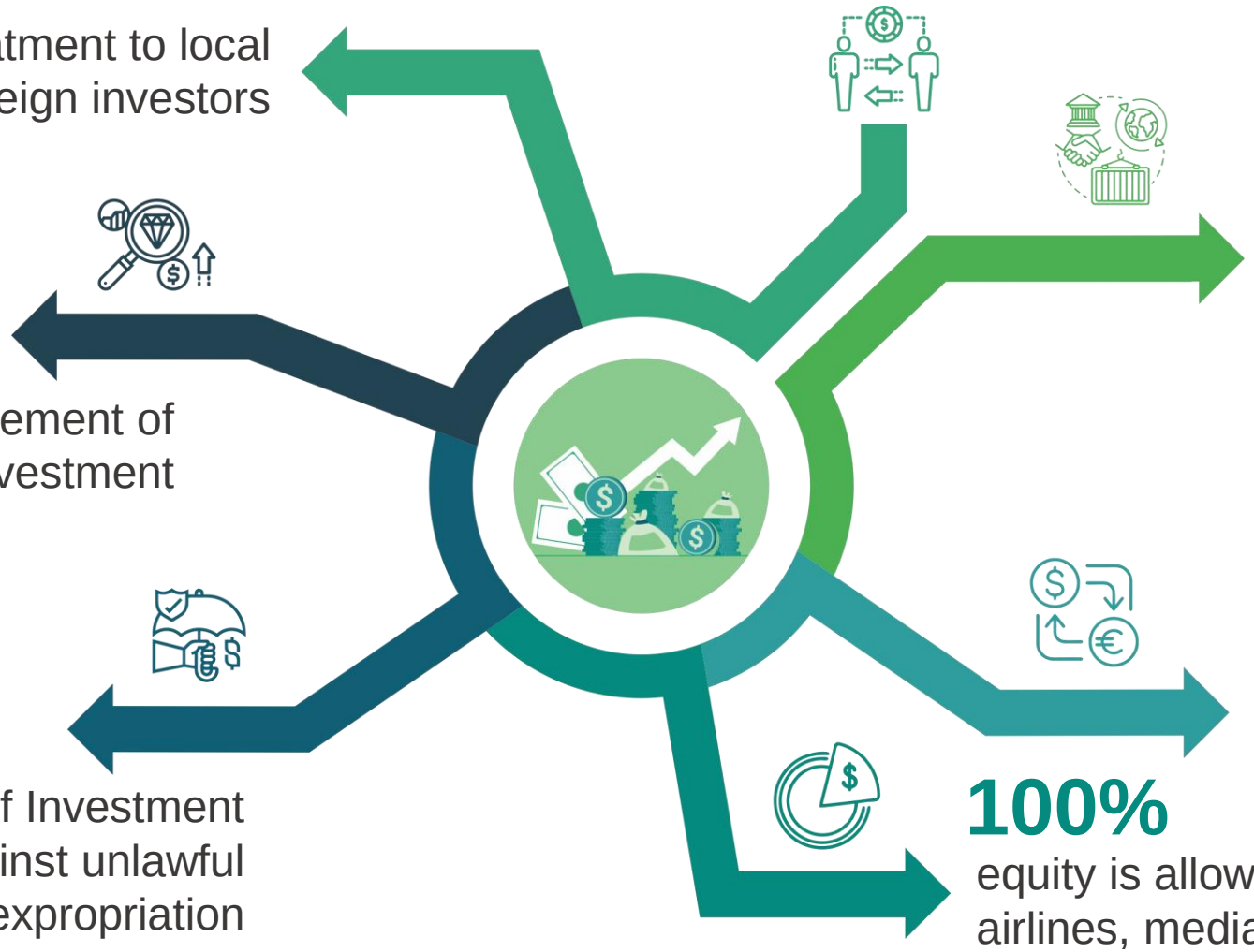


2

4

Highest increase in Ease of Doing Business ranking – from 147 to 108

Liberal Investment Regime



Uniform treatment to local and foreign investors

100%

repatriation of profits, dividends

No requirement of minimum investment

No restriction on currency convertibility

Protection of Investment against unlawful expropriation

100%

equity is allowed except agriculture, airlines, media & banking

Pakistan SDG Investment Opportunity

Potential of private sector investment of

$96.2bn

Transport

Total **$38.5bn** investment required to achieve significant improvements by 2030

$13.5bn

Digital Access

$34.0bn

Total **$56.6bn** investment required to achieve universal access by 2030

Clean Water & Sanitation

Total **$40.1bn** investment required to achieve universal access by 2030

$4.0bn

Power

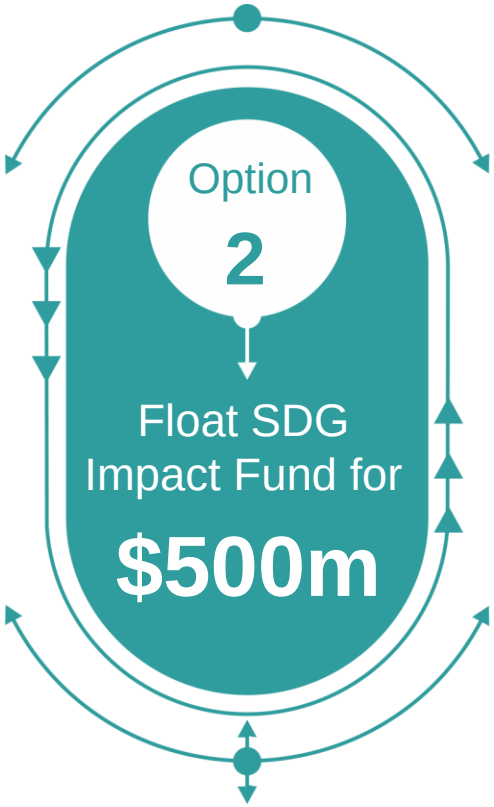
$44.7bn

Total **$99.3bn** investment required to achieve universal access by 2030

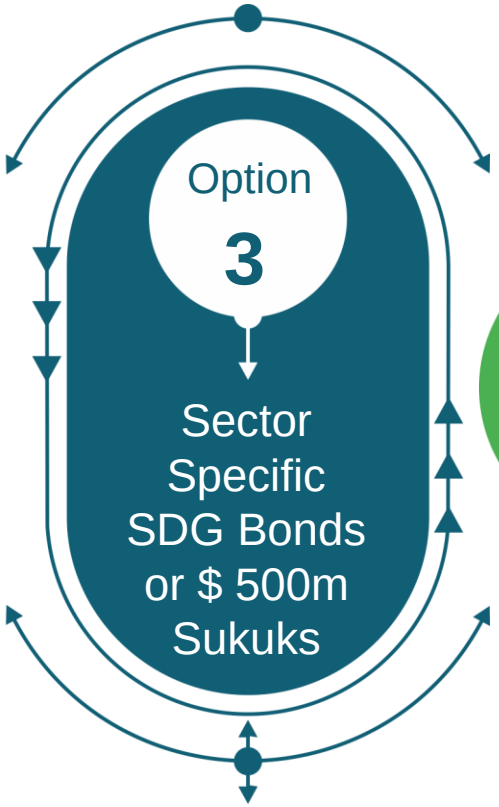
Source: Opportunity 2030. The Standard Chartered SDG Investment Map

Flexible Investment Options

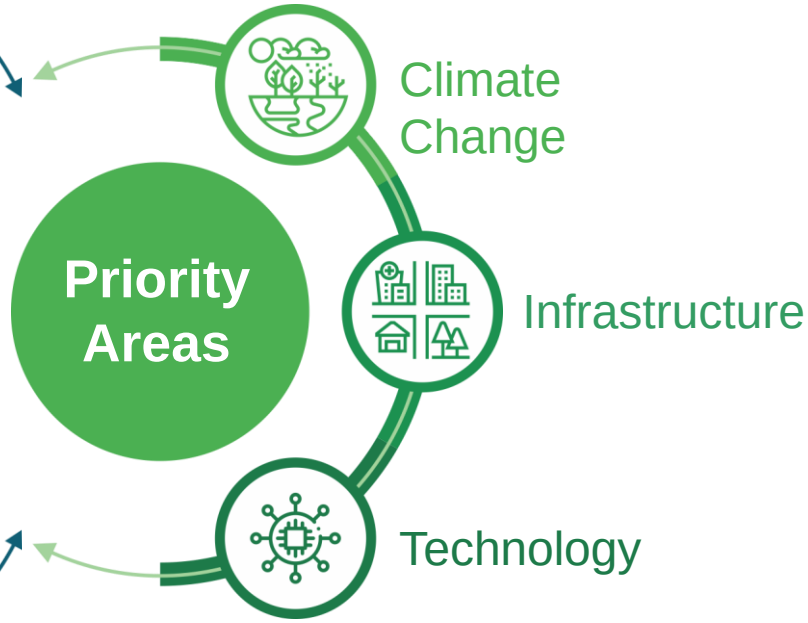
Board of Investment



Strategic Partnerships Opportunities with Pakistani Financial and Corporate Sector



Solid Assets & Securitized Cash Flows managed by Credible Asset Management Companies



PRIORITY SDG
ALIGNED PROJECTS

Pakistan Board of Investment

- One Window for your investment endeavors in Pakistan
- Apex Investment Promotion & Facilitation Agency
- Focal Agency to Improve Legislative/Regulatory/Policy Environment for Investment
- Secretariat & Lead Agency for

Investment Policy	Special Economic Zones	Industrial Cooperation under CPEC	Ease of Doing Business
Regulatory Modernization Initiative	Recommendation for Work Visa	Branch / Liaison Office	(www.invest.gov.pk)

Investment Facilitation

COMPANY REGISTRATION IN A SINGLE DAY

ONLINE VISA FACILITATION

ONLINE ONE WINDOW PORTAL

SPECIAL INCENTIVES FOR TECHNOLOGY & SOCIAL SECTORS

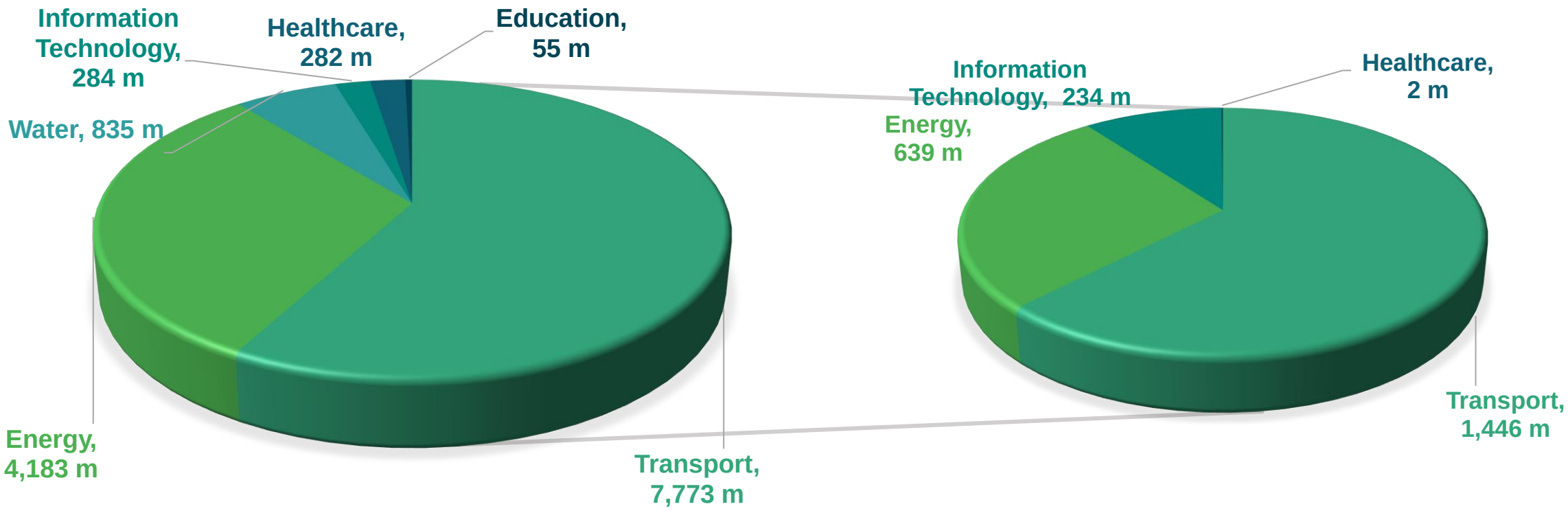
BORROWING FACILITATION FROM FINANCIAL SECTOR

INVEST PAKISTAN

Repository of SDGs Aligned Projects

$13 Billion SDG Investment Opportunity

$2 Billion Priority Projects

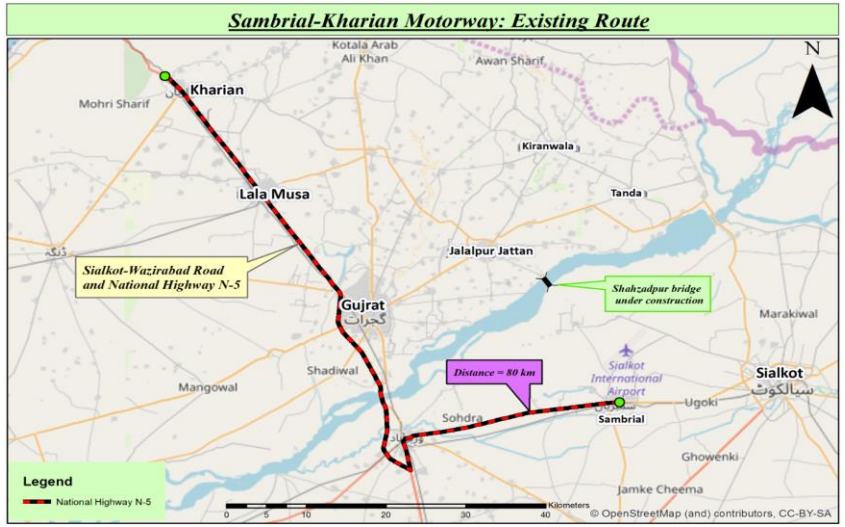


List of Priority SDGs Aligned Projects

- Sialkot-Kharian-Rawalpindi Motorway Phase-I
- Sialkot-Kharian-Rawalpindi Motorway Phase-II
- 188 MW Naran Hydropower Project
- 96 MW Batakundi Hydropower Project
- Medical Devices Development Center
- Silicon Solar PV Panel Fabrication Facility (500 MW/annum)
- Production of Agriculture Drones & 250 Smart Farms
- NED Technology Park
- Startup Incubations Across Pakistan

Project 1 SIALKOT-KHARIAN-RAWALPINDI MOTORWAY –PHASE I

Project Location Map



Description :

This important toll road project is designed with a total length of 69 km connecting Pakistan's largest SME industrial cities. This strategic project will play a major role in Pakistan's post-COVID economic recovery. The basic design and commercial feasibility study have been done. The project will be extension of 4-lane Lahore-Sialkot Motorway which is operational for traffic. The Sialkot-Kharian project would further be extended up to Rawalpindi in next phase. The project will reduce cost of doing business and increase commercial transport connectivity.

Sector: Communication **Sub Sector:** Transport

Government Contracting Agency: National Highway Authority (NHA)
Contact Person: Dr. Iftikhar Mehboob. mehboob.iftikhar@gmail.com; Aatif Umer, BOI aatifumar@invest.gov.pk
Estimated Concession Period : 25 years

Business Opportunity: Construction Industry Growth; Consultancy Firm's (Engineering, Financial, and Legal) to flourish; Service Area Industry (Hoteling Industry, Trucking Stations, Fueling Stations, etc.)

Project Status: Project is currently on Request For Proposal phase

Indicative Government Support & Guarantee:
Potentially guaranteed by Government Subsidy in the form of Viability Gap Fund (VGF)

Implementation Schedule:

1. Preparation	:	2020 - 2021
2. Land Acquisition	:	Dec-2021
3. Construction	:	2022-2023
4. Operation	:	Jan-2024

Social Impact Outcomes of the Project

Outcome 1: Industrial cities like Sialkot, Gujrat, and Wazirabad with high-speed connectivity. Will also reduce migration pressure to large cities.

Outcomes 2: Thousands of jobs will be created allied with forty industries associated with the construction of road.

Project 1 SIALKOT-KHARIAN-RAWALPINDI MOTORWAY – PHASE I

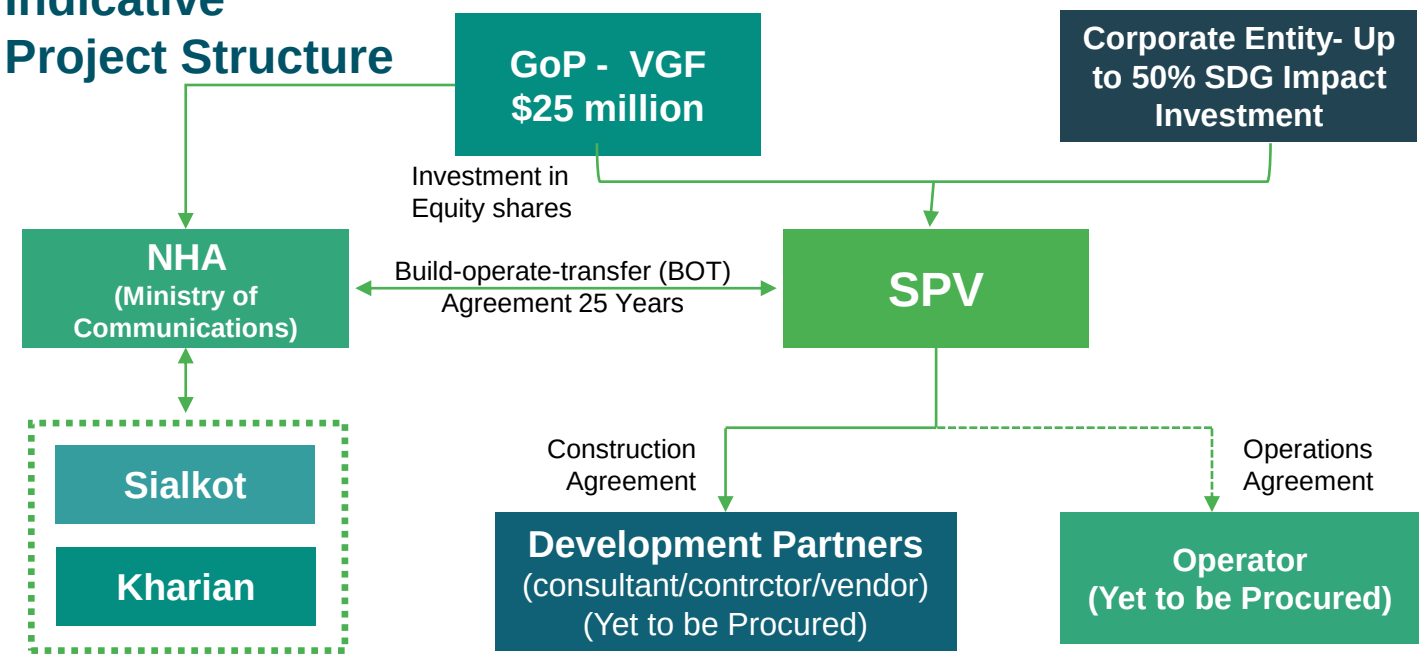
Corporate Structure of the Project
Special Purpose Vehicle (SPV)

Estimated Project Cost : $ 290 million
(Approx)

Financial Feasibility:

Equity IRR :	17%
Project IRR :	14%

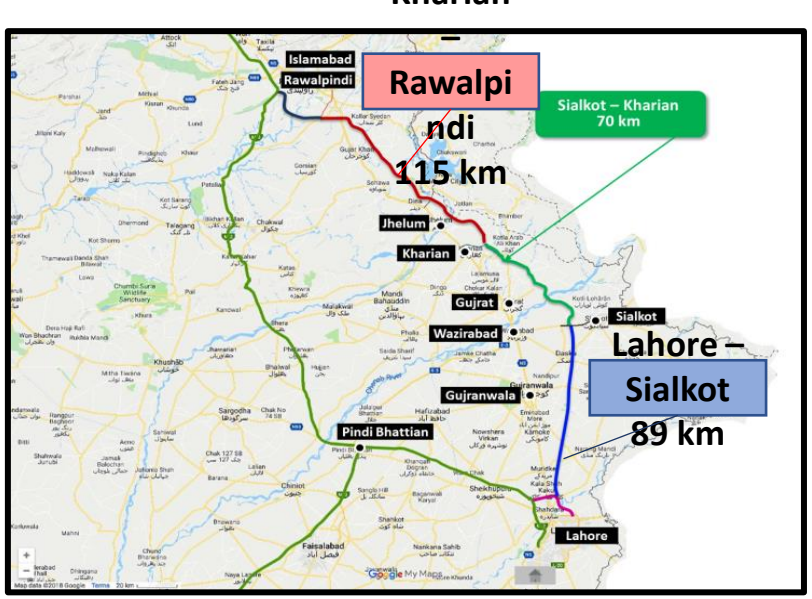
Indicative Project Structure



Project Timeline

Project 1 SIALKOT-KHARIAN-RAWALPINDI MOTORWAY –PHASE II

Project Location Map



Description :

This Phase-II of the project is designed with a total length of 115 km. The basic design and commercial feasibility study is in progress. The project will be extension of 4-lane Sialkot-Kharian Motorway which is under procurement. The construction of Kharian-Rawalpindi section shall complete the Lahore-Sialkot-Kharian-Rawalpindi Motorway network. It will be a major initiative to connect SME hubs for job creation and productivity enhancement.

Sector: Communication **Sub Sector:** Transport

Government Contracting Agency: National Highway Authority (NHA)
Contact Person: Dr. Iftikhar Mehboob. mehboob.iftikhar@gmail.com; Aatif Umer, BOI aatifumar@invest.gov.pk
Estimated Concession Period : 25 years

Business Opportunity: Construction Industry Growth; Consultancy Firm's (Engineering, Financial, and Legal) to flourish; Service Area Industry (Hoteling Industry, Trucking Stations, Fueling Stations, etc.)

Project Status: Project is currently on Request For Proposal phase

Indicative Government Support & Guarantee:
Potentially guaranteed by Government Subsidy in the form of VGF

Implementation Schedule:

1. Preparation	:	2020 - 2021
2. Land Acquisition	:	2022
3. Construction	:	2022-2024
4. Operation	:	Jan-2025

Social Impact Outcomes of the Project

Outcome 1: Connectivity with impoverished areas. Deprived regions will be connected. Will reduce pressure on urban migration.

Outcomes 2: Thousands of jobs will be created allied with forty industries associated with the construction of road.

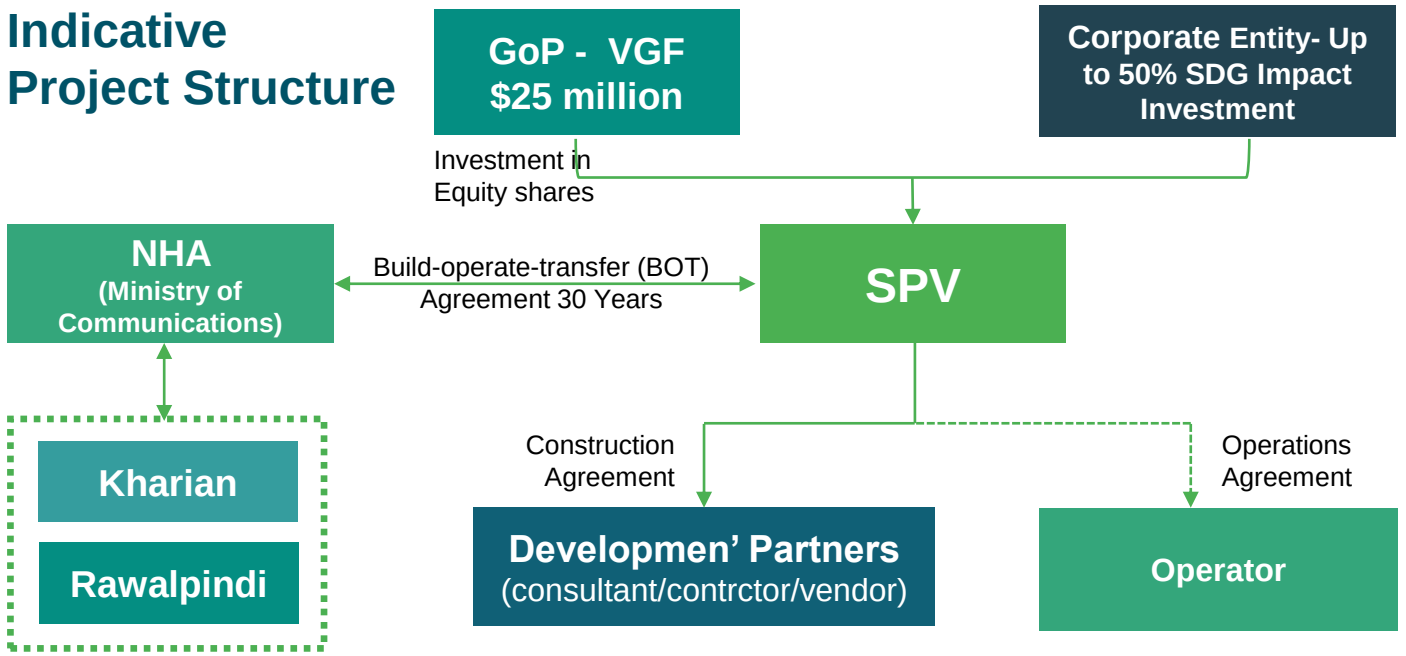
Project 1 SIALKOT-KHARIAN-RAWALPINDI MOTORWAY – PHASE II

Corporate Structure of the Project
Special Purpose Vehicle (SPV)

Estimated Project Cost : $ 1,155.6 million

Financial Feasibility:
Equity IRR : 17% (financial feasibility is finalized)
Project IRR : 14%

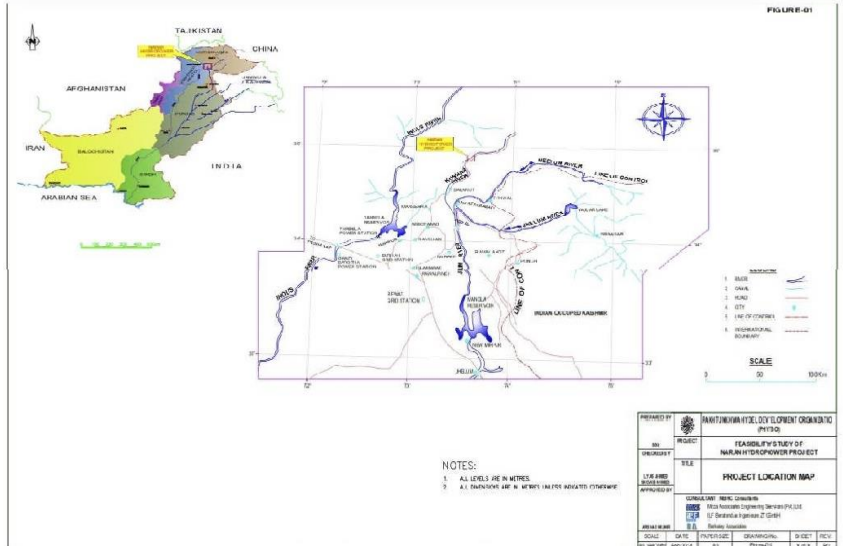
Indicative Project Structure



Project Timeline

Project 2 188 MW NARAN HYDROPOWER PROJECT

Project Location Map



Description :
The feasibility study has resulted in a project size of 188 MW with a good economic rate of return. Naran dam and powerhouse have been, proposed in the river stretch between Kaghan and Batakundi on Kunhar River. The dam site on Kunhar River is 12 km upstream of major tourist city of Naran. The powerhouse is to be located on the left bank of Kunhar River, 11 km downstream of Naran town. IFC has been appointed as the Transaction Manager.

Sector: Clean Energy **Sub Sector:** Construction

Government Contracting Agency: Pakhtunkhwa Energy Development Organization, Energy & Power Department, GoKP. Contact Person: Mr. Muhammad Mazahir Ali. kpprojects@kpboit.gov.pk ; Aatif Umer, BOI aatifumar@invest.gov.pk
Estimated Construction Period : 7 years

Business Opportunity: Available for investment in PPP mode after International Competitive Bidding (ICB)

Project Status: Project is currently on Request For Proposal phase

Indicative Government Support & Guarantee:
Potentially guaranteed by Federal Government Agency.

Implementation Schedule:

1. Preparation	:	2021-2022
2. Land Acquisition	:	2023-2024
3. Construction	:	2024-2028
4. Operation	:	2028

Social Impact Outcomes of the Project
Outcome 1: Several number of new businesses will be generated. Provision of low-cost clean energy.

Outcomes 2: A greater number of jobs will be created both during implementation and operation phases. Reduction in carbon emissions.

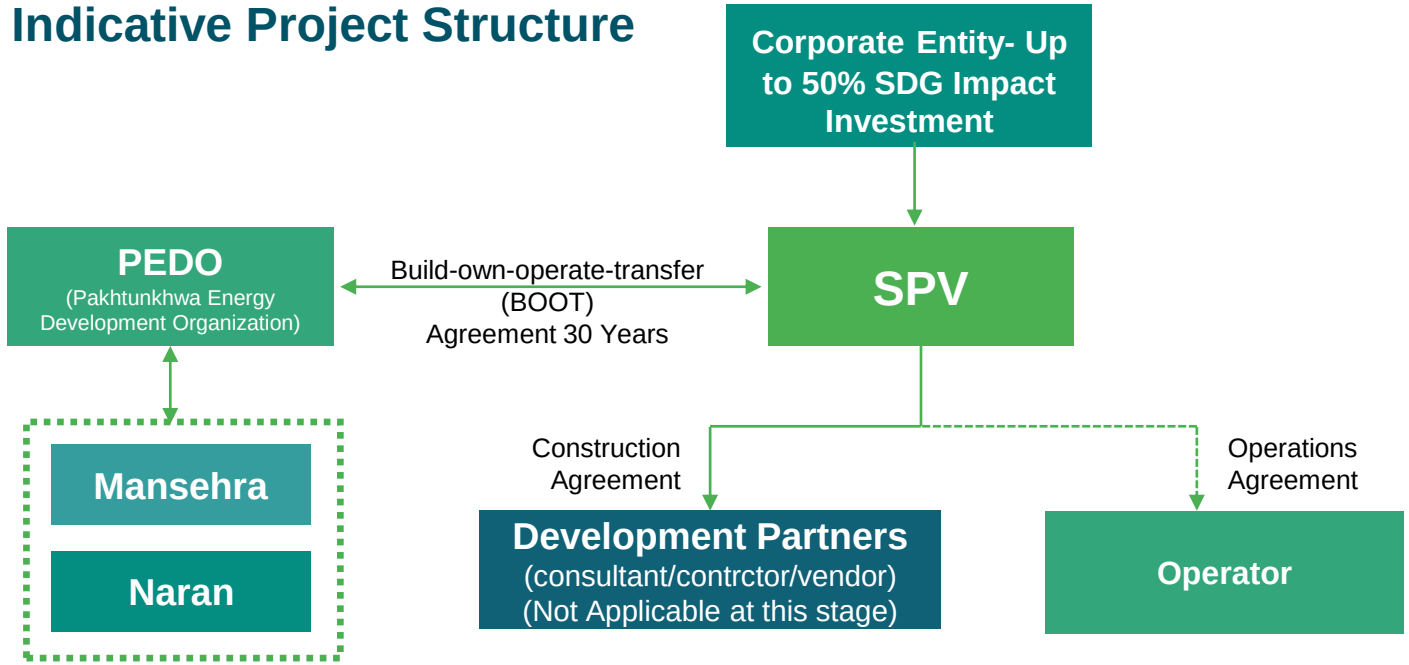
Project 2 188 MW NARAN HYDROPOWER PROJECT

Corporate Structure of the Project
Special Purpose Vehicle (SPV)

Estimated Project Cost : $ 431 million

Financial Feasibility:
FIRR : 7.05%

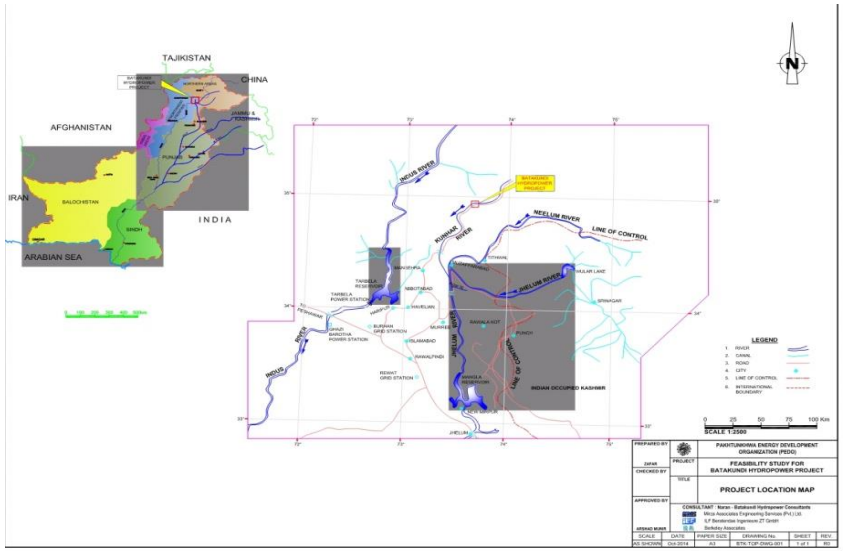
Indicative Project Structure



Project Timeline

Project 3 96 MW BATAKUNDI HYDROPOWER PROJECT

Project Location Map



Description :
The feasibility study has resulted in a project size of 96 MW with good economic rate of return. The Batakundi HPP is proposed to be located on Kunhar River, with its powerhouse located about 01 km downstream of Batakundi Village, which falls in District Mansehra of KP Province. The project area is accessible by road from Rawalpindi / Islamabad through Abbotabad, Mansehra and Balakot. IFC has been appointed as Transaction Manager.

Sector: Clean Energy **Sub Sector:** Construction

Government Contracting Agency: Pakhtunkhwa Energy Development Organization, Energy & Power Department, GoKP. Contact Person: Mr. Muhammad Mazahir Ali. kpprojects@kpboit.gov.pk ; Aatif Umer, BOI aatifumar@invest.gov.pk
Estimated Construction Period : 7 years

Business Opportunity: Available for investment in PPP mode after International Competitive Bidding (ICB)

Project Status: Project is currently on Request For Proposal phase

Indicative Government Support & Guarantee:
Potentially guaranteed by Federal Government Agency.

Implementation Schedule:

1. Preparation	:	2021 - 2022
2. Land Acquisition	:	2023-2024
3. Construction	:	2024-2028
4. Operation	:	2028

Social Impact Outcomes of the Project
Outcome 1: Several number of new businesses will be generated. Provision of low-cost clean energy.

Outcomes 2: A greater number of jobs will be created both during implementation and operation phases. Reduction in carbon emissions.

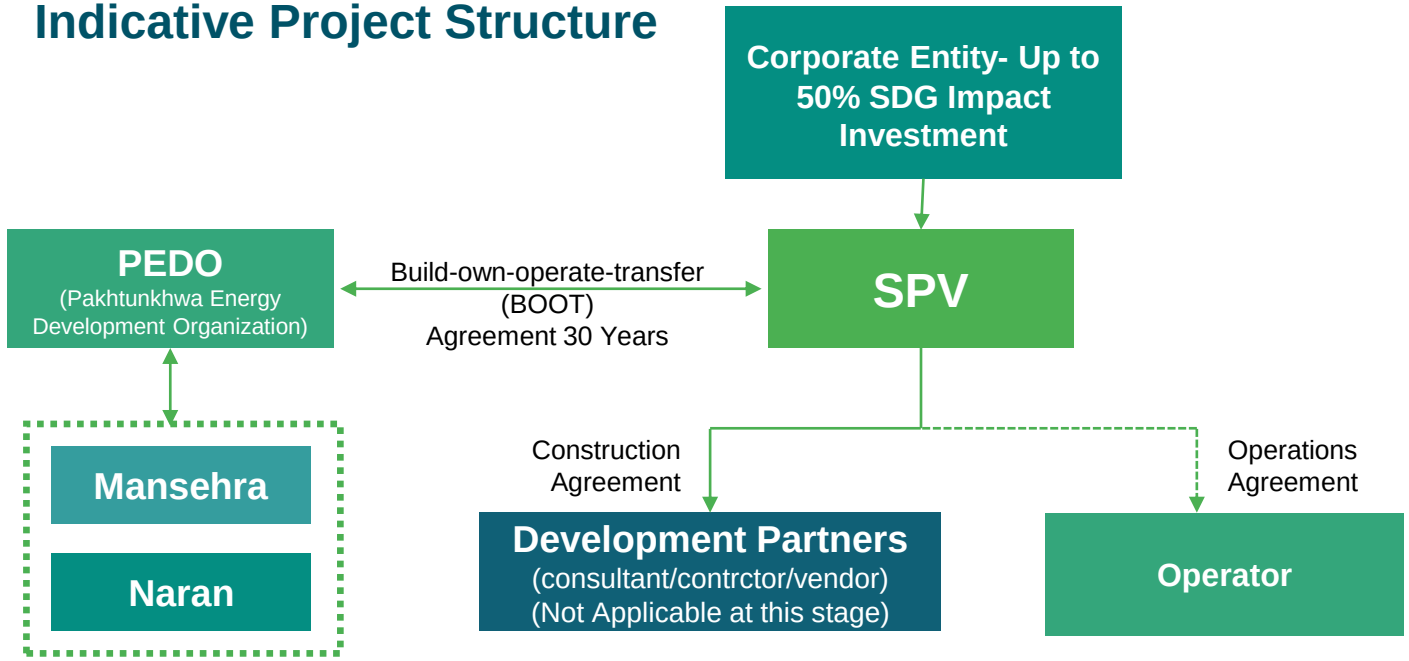
Project 3 96 MW BATAKUNDI HYDROPOWER PROJECT

Corporate Structure of the Project
Special Purpose Vehicle (SPV)

Estimated Project Cost : $ 188.29 million

Financial Feasibility:
FIRR : 10.87%

Indicative Project Structure



Project Timeline

Project 4 MEDICAL DEVICES DEVELOPMENT CENTER

Project Location

Description :
N-ovative Health Technologies (previously named as MDDC) is a public sector company established at National University of Sciences and Technology (NUST) under the special directives of Prime Minister's Office. The company is looking to expand and scale up operations. It is currently producing Low-cost treatment solution for the patients suffering from Heart (cardiac) diseases.

Sector: Healthcare **Sub Sector:** Medical Equipment

Government Contracting Agency: Ministry of Science and Technology & NUST
Contact Person: Mr. Hamza Haroon. hamza.a.haroon@gmail.com ; Aatif Umer, BOI aatifumar@invest.gov.pk
Estimated Construction Period : 1 year

Business Opportunity: Work on ventilators, syringe pumps, dialysis machine, patient monitors, cathedrals. Immediate expansion of 3 products scaling up to 10 products in next two years.
Project Status: Project is currently producing small scale devices such as stents

Indicative Government Support & Guarantee:
Supported by Ministry of Science and facility
European commission certified and DRAP licensed production facility for medical devices

Implementation Schedule:

1. Preparation	:	2021
2. Construction	:	2021-2022
3. Operation	:	2022

Social Impact Outcomes of the Project
Outcome 1: Availability of cost-effective healthcare services in Pakistan.

Outcomes 2: Reduction in import bill and job opportunities in the healthcare sector. Contribution to Post-COVID healthcare provision.

Project 4 MEDICAL DEVICES DEVELOPMENT CENTER

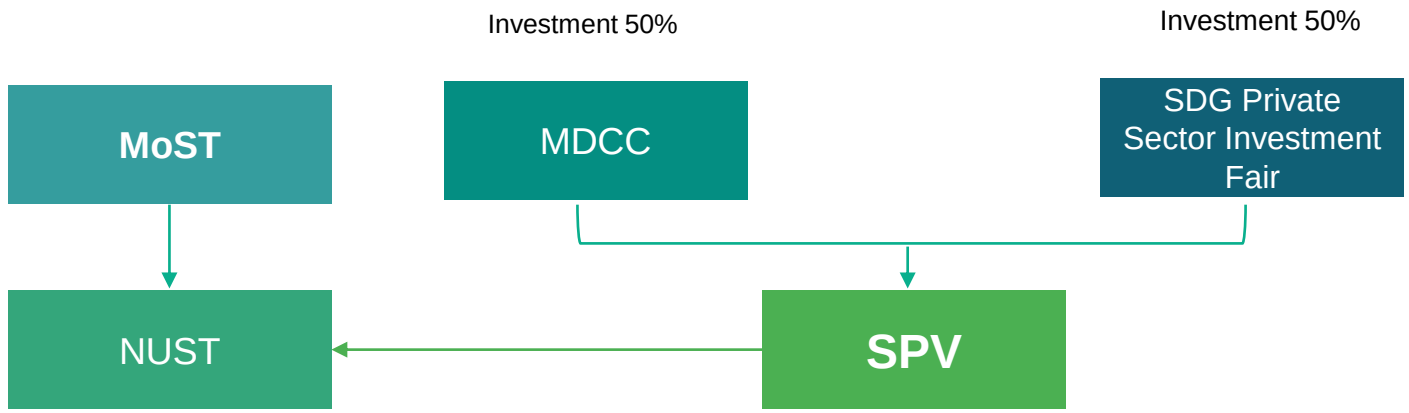
Corporate Structure of the Project
Public Sector For Profit Company looking to Expand

Estimated Project Cost : $ 2.31 million

Financial Feasibility:

FIRR : 7.1%

Indicative Project Structure

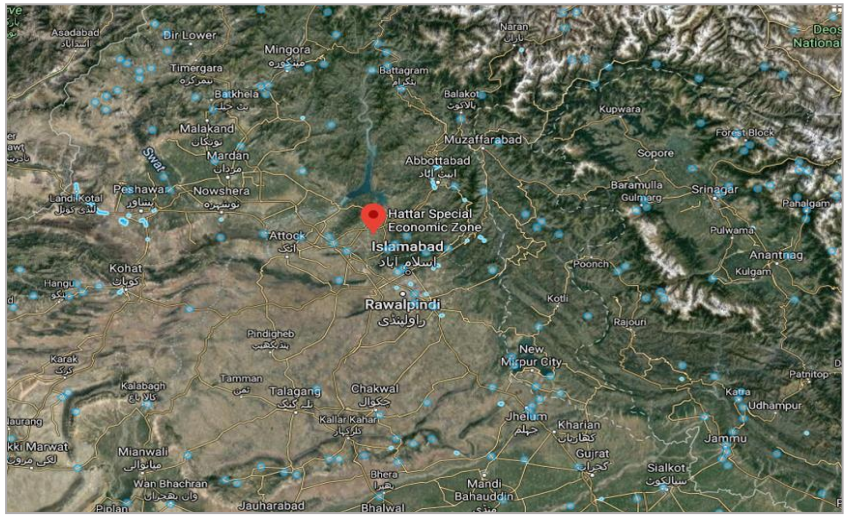


Project Timeline

Project 5

SILICON SOLAR PV PANEL FABRICATION FACILITY (500 MW/ANNUM)

Project Location Map



Description :

Pakistan is importing more than 3000MW PV panels/annum. The demand of PV panels is increasing exponentially. It is estimated that 2900 GW of electricity can be generated in Pakistan using day light hours. Pakistan being the sunbelt country will be one of the largest consumers of PV panels. Importing huge quantity of PV panels is already consuming substantial amount of foreign exchange which is surely expected to increase tremendously in near future. In view of above local manufacturing of PV panels is direly needed.

Sector: Renewable Energy **Sub Sector:** Solar Photovoltaics

Government Contracting Agency: Pakistan Council of Renewable Energy Technologies Dr. Afzal Hussain Kamboh. Afzal8isb@yahoo.com ; Aatif Umer, BOI aatifumar@invest.gov.pk

Estimated Construction Period : 2 years

Business Opportunity: B2B Model.
Project Status: Project is currently on Request For Proposal phase

Indicative Government Support & Guarantee:
Potentially guaranteed by Ministry of Science & Technology

Implementation Schedule:

1. Preparation : 2021 - 2022
2. Land Acquisition : 2022-2023
3. Construction : Jan 2024
4. Operation : After Construction

Social Impact Outcomes of the Project

Outcome 1: Major contribution towards affordable renewable energy. Import substitution.

Outcomes 2: Reduced carbon emission, job creation, climate change risk mitigation.

Project 5 SILICON SOLAR PV PANEL FABRICATION FACILITY (500 MW/ANNUM)

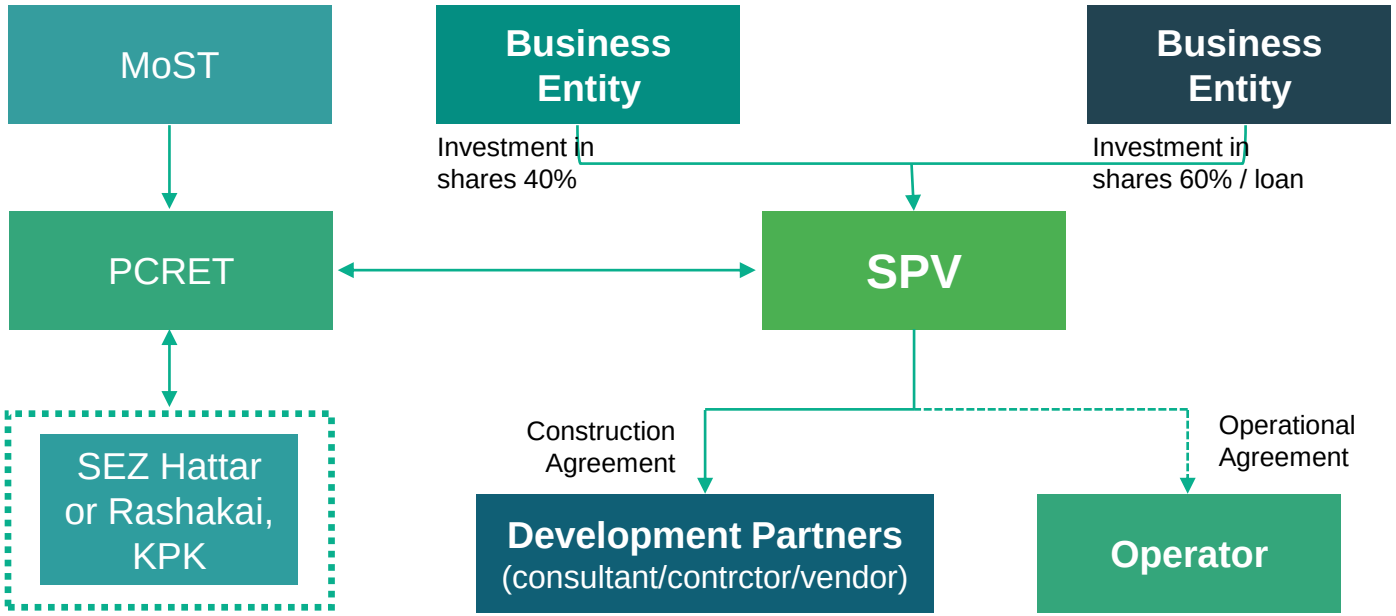
Corporate Structure of the Project
(B2B Model)

Estimated Project Cost : $ 19.21 million

Financial Feasibility:

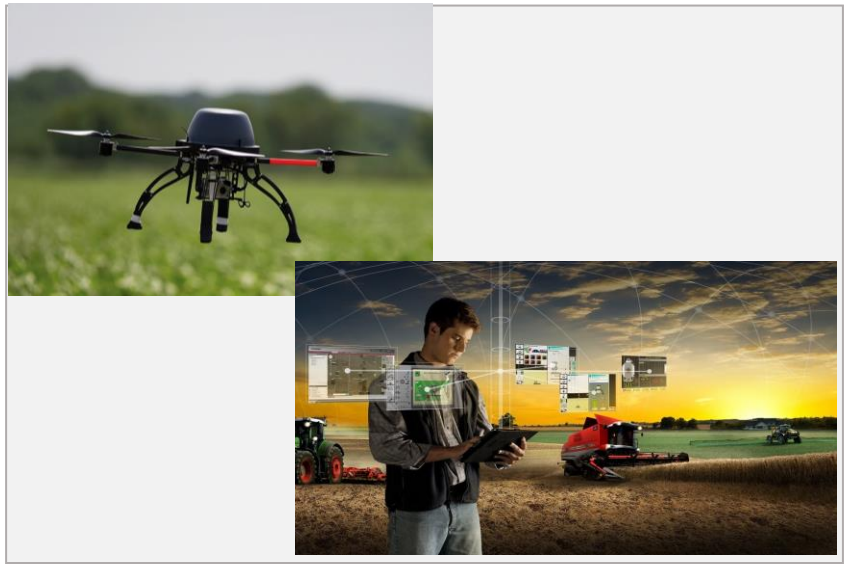
IRR: 12.20%

Indicative Project Structure



Project Timeline

Project 6 PRODUCTION OF AGRICULTURE DRONES & 250 SMART FARMS



Description :
Global Drone Technology is growing at a rate of over 20% and is expected to double in the next 5-7 year. Pakistan, an agricultural country, can greatly benefit from this technology specifically as it implements technology towards farming. Smart Farms is the future of farming which allows on average 10X yield generation with efficient utilization of land. Smart farms incorporate latest technologies like Drone technologies and sensors to increase yield, safer production and efficient utilization of resources.

Sector: Agriculture and Food Technology. **Sub-Sector:** Drone Technology

Government Contracting Agency: Ministry of Science and Technology, Private Sector. Contact Person: Hamza Haroon. hamza.a.haroon@gmail.com ; Aatif Umer, BOI aatifumar@invest.gov.pk

Estimated Construction Period : 3 years

Business Opportunity: To build A comprehensive collection of interoperable technologies for farm-level precision agriculture methods comprising:

- Multi-rotor, Hybrid & Fixed Wing Unmanned Aerial Systems (UAS)
- Array of Imaging Sensors
- High Performance & Cloud Computing (HPCC)
- 250 Smart Farms across Pakistan that venture in high demand crop using optimized technology

Project Status: Feasibility completed. Looking for financial close.

Indicative Government Support & Guarantee:
Facilitated by Ministry of Science and Technology

Implementation Schedule:

1. Preparation	: 2021-2022
2. Facility construction	: 2022-2023
3. Operation	: 2023 -beyond

Social Impact Outcomes of the Project

Outcome 1: Improved productivity in agriculture sector. Contribution towards food security.

Outcomes 2: Direct impact on rural poverty reduction through higher yields and job opportunities.

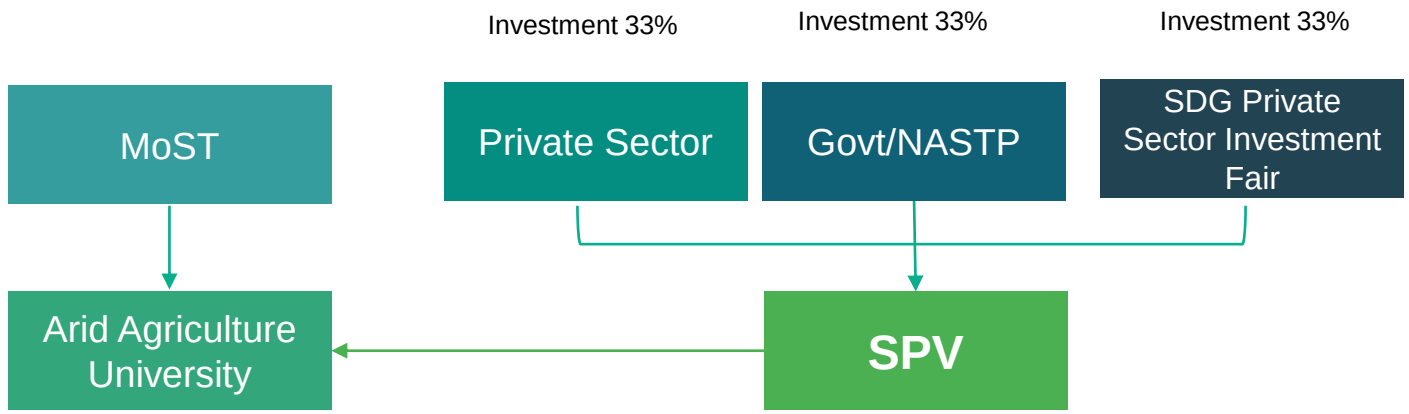
Project 6 PRODUCTION OF AGRICULTURE DRONES & 250 SMART FARMS

Corporate Structure of the Project
Public Private Partnership.

Estimated Project Cost : $ 58.1 million

Financial Feasibility:
FIRR : 23.19%

Indicative Project Structure



Project Timeline

Project 7 NED TECHNOLOGY PARK

Project Location Map

Description :
NED Interregional Technology Park (ITP) will be the first fully integrated Science and Technology Park of Pakistan to be established within the premises of NED University Karachi under Public Private Partnership model. The initiative is meticulously aimed at redesigning the knowledge economy by stimulating and nurturing innovation-led germination and growth of hi-tech entities. Interregional Technology Park (ITP) will be the new national tech-pad where entrepreneurs and multinationals will come together to discover, ideate, create, collaborate and break new ground.

Sector: Technology development **Sub Sector:** IT & Engineering

Government Contracting Agency: NED University of Engineering & Technology, Karachi. Contact Person: Dr. Asad Arfeen. arfeen@neduet.edu.pk; Aatif Umer, BOI aatifumar@invest.gov.pk
Estimated Concession Period : 20 years

Business Opportunity: Bidder/Financer under Public Private Partnership

Project Status: Project is currently on Request For Proposal phase

Indicative Government Support & Guarantee:
Partially supported by Government of Sindh with logistical support from International Association of Science Parks & Areas of Innovation (IASP) Spain.

Implementation Schedule:

1. Preparation	:	2019-2020
2. Land Acquisition	:	own land
3. Construction	:	2021-2023
4. Operation	:	Dec 2023

Social Impact Outcomes of the Project
Outcome 1: 200 new business opportunities. Major contribution in productivity enhancement through technology.

Outcomes 2: 4000 new jobs will be created. Digital adoption facilitation through university industry linkage.

Project 7 NED TECHNOLOGY PARK

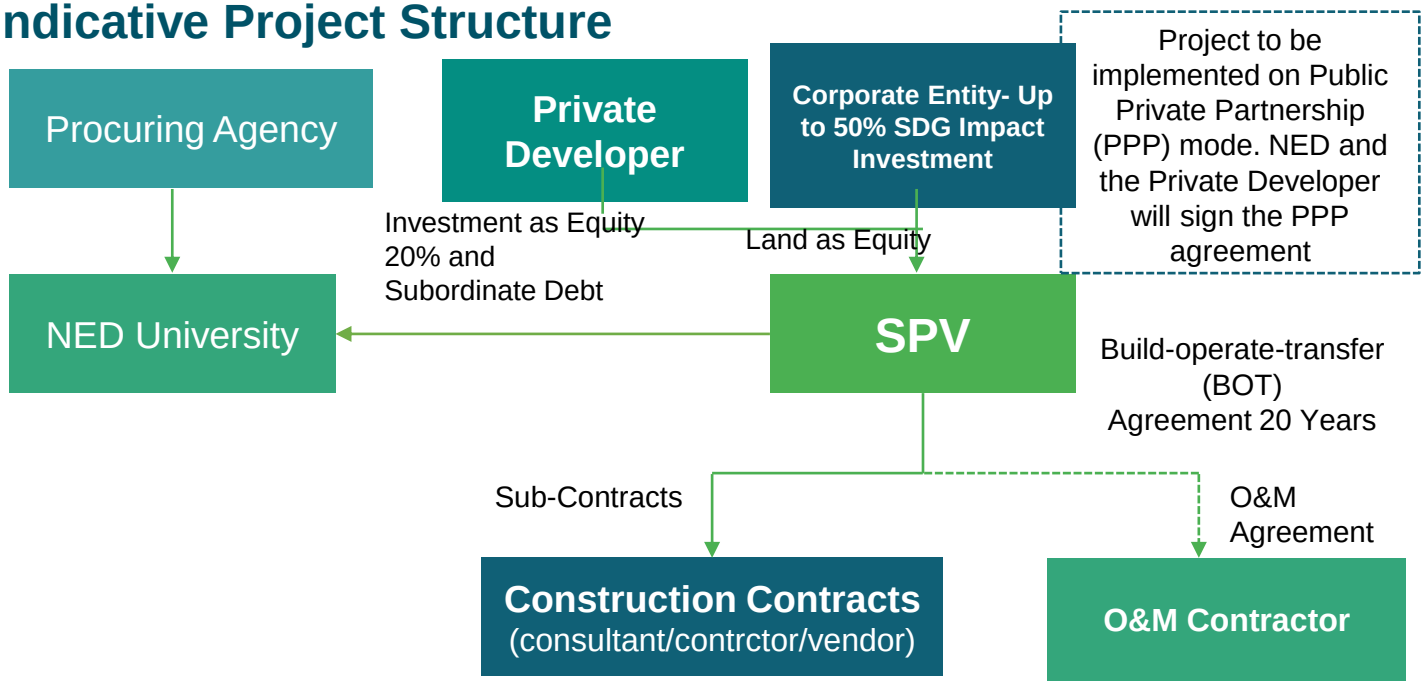
Corporate Structure of the Project
Special Purpose Vehicle (SPV)

Estimated Project Cost : $ 55.74 million

Financial Feasibility:

FIRR	:	15% approx
NPV	:	N/A

Indicative Project Structure



Project Timeline

Project 8 STARTUP INCUBATIONS ACROSS PAKISTAN

Description :
National Incubation Center is a joint venture of Government of Pakistan and major corporate entities. NIC is currently running five start-up facilities in all provinces of Pakistan. Each facility hosts 50 start-up tech companies. Siting the impact of ongoing projects under national incubation center, the Ministry of Information Technology has decided a major expansion for establishing innovation ecosystems and themed incubators across twenty locations in the country. This project is making huge contribution towards youth employment and technology innovation in Pakistan.

Sector: Information Technology Entrepreneurship **Sub Sector:**

Government Contracting Agency: National Incubation Center, Islamabad.
Contact person: Muhammad Saleem Ranjha. saleemranjha@yahoo.com; Aatif Umer, BOI aatifumar@invest.gov.pk
Estimated Concession Period : 18 months

Business Opportunity: Developing Pakistan's Startup Ecosystem

Project Status: Project is currently on Request For Proposal phase

Indicative Government Support & Guarantee:
N/A

Implementation Schedule:

1. Preparation	:	2021
2. Venue Acquisition	:	2021-2022
3. Renovation	:	2022
4. Operation	:	Dec 2022

Social Impact Outcomes of the Project
Outcome 1: Incubating and supporting 500 startups per annum. Promoting digital connectivity and innovation.

Outcomes 2: Creating 100,000 jobs across the span of the project through the companies.

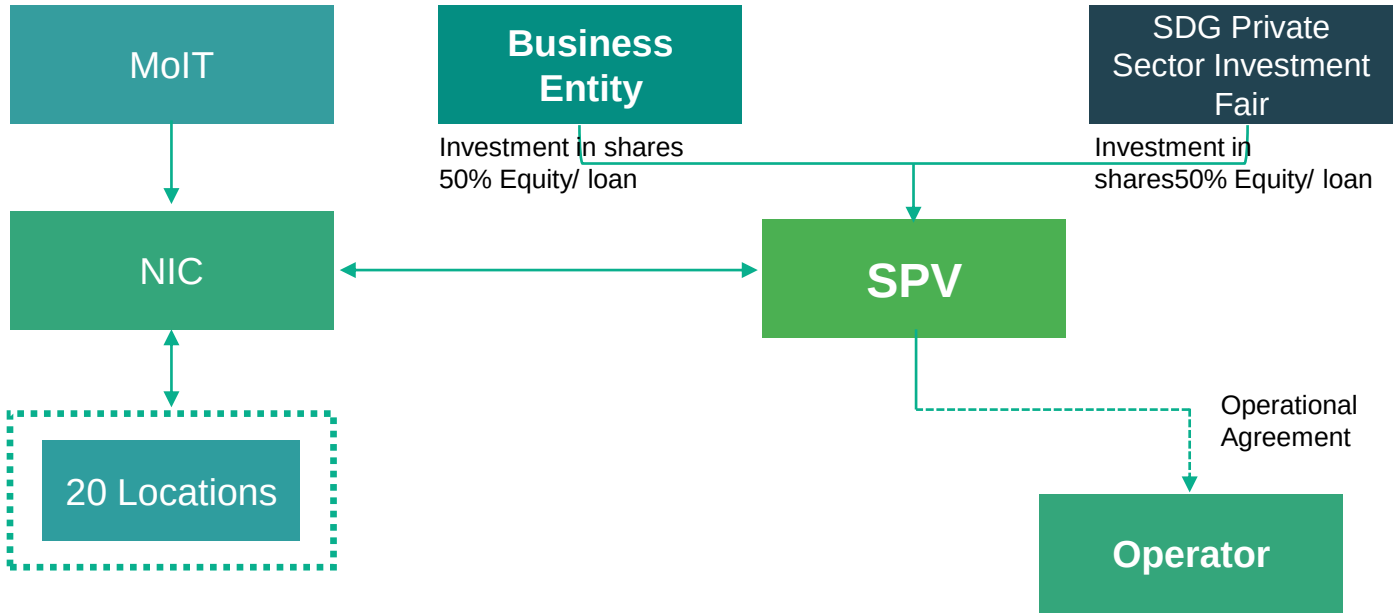
Project 8 STARTUP INCUBATIONS ACROSS PAKISTAN

Indicative Project Structure

Corporate Structure of the Project
Relevant Government Ministry and Private Company

Estimated Project Cost : $ 120 million

Financial Feasibility:
FIRR : 14% (for current incubation centers)
NPV : N/A



Project Timeline

Thank you

Q&A

Project 1 SIALKOT-KHARIAN-RAWALPINDI MOTORWAY –PHASE I

Additional Information Project Cost Overview

Component of the project	Investment cost $ Million
Project preparation	----
Land acquisition	25.70
Construction	225
Project management	----
Interest	11.50
Total	**290.00**

Project 4 MEDICAL DEVICES DEVELOPMENT CENTER

Additional Information Project Cost Overview

Component of the project	Investment cost $
Civil Works	402,077
Furnishing	12,903
Cleanrooms Class 10,000	19,355
Manufacturing Equipment	589,935
Testing and Validation	120,000
Certification	38,710
Hardware	22,581
Honorarium	6,452
Operational Cost	456,516
Vehicle	19,355
Backup Generator	16,129
Hardware/Others	6,452
Clinical trials	335,484
Misc.	90,323
Total	**2,136,271**

Project 5 SILICON SOLAR PV PANEL FABRICATION FACILITY (500 MW/ANNUM)

Additional Information Project Cost Overview

Component of the project	Investment cost $ million
Project preparation	1.10
Land acquisition	22 (lease period 99 years)
Construction	16.77
Project management	1.29
Interest	0.05
Total	**19.21**

Project 6 PRODUCTION OF AGRICULTURE DRONES & 250 SMART FARMS

Additional Information Project Cost Overview

Component of the project	Investment cost $ million
AgriVerse Hardware & Software Infrastructure	3.50
Unmanned Aerial Systems for Precision Agriculture	1.80
Indigenous Development of a Synthetic Aperture Radar	1.70
UAS Airspace Management Solution	0.50
GreenAI - Software Ecosystem & Sensor Suite	1.00
Soil Microbes, Nano Fertilizers, Bio-Pesticides	3.50
High Performance Cloud Computing (HPCC)	2.5
250 Hydroponic Farms	43.5
Total	**58.04**

Project 7 NED TECHNOLOGY PARK

Additional Information Project Cost Overview

Component of the project	Investment cost $ million
Project preparation	0.74
Land acquisition	0
Construction	55
Project management	N/A
Interest	N/A
Total	**55.74**

Project 8 STARTUP INCUBATIONS ACROSS PAKISTAN

Additional Information Project Cost Overview

Component of the project	Investment cost $ million
Venue Acquisition	Ministry/STZA to Support
Renovation	40
Operations	60
Misc.	20
Total	**120**