PROJECT TEASERS FOR INVESTMENTS IN

PAKISTAN'S CARBON MARKETS

High level Visit from Kingdom of Saudi Arabia

9-11th January 2026

MINISTRY OF CLIMATE CHANGE &
ENVIRONMENTAL COORDINATION

GOVERNMENT OF PAKISTAN

Ministry of Climate Change & Environmental Coordination

1. Lakhodair Dumpsite (LWMC) Landfill Gas Recovery

Opportunity Summary	
Ministry	▪ Ministry of Climate Change
Project description	▪ A Greenfield Investment in Landfill Gas Recovery Project ▪ Landfill in use since 2016; existing waste about 20 million tons, receiving around 5000 tons per day
Market Dynamics	▪ High demand for Methane Projects delivering ITMOS ▪ Distribution of methanized landfill gas through the existing natural gas supply system in Lahore ▪ It has strong social, environmental, and health co-benefits
Unique value proposition	▪ High quality Carbon credits ▪ Estimation of 350,000 reduction tCO2e per year for 10-15 years ▪ Supported by an existing CDM Methodology ▪ The project may thus comfortably be fully financed through carbon credits
Business Model	▪ It might be offered to an investor on a BOT basis where the return on the investment could be a guaranteed issuance of ITMOs ▪ Distribution of methanized landfill gas through the existing natural gas supply system in Lahore may be technologically. ▪ Off-take of biodiesel for fleets of vehicles may considered be legally easier, but technologically complex.
Investment	▪ 20 m USD, which means an abatement cost of 1.7-2.5 USD/tCO2e

Project Financials	
Project Cost 20 Million USD	**Project IRR** 15.01%
Equity IRR 30% equity investment, IRR =57.4%	**Payback** 4.5 years

Assumptions: 30% equity investment, 70% loans, at interest rate 8% per year; ITMO price: USD 15 per tCO2e; 18% host country fees; project crediting period: 10 years

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2. Peshawar Landfill Site

Opportunity Summary	
Ministry	▪ Ministry of Climate Change
Project description	▪ A Greenfield Investment in Landfill Project ▪ Integrated waste management projects in four cities
Market Dynamics	▪ The project does not include methane capture of legacy waste ▪ High demand for Methane Projects delivering ITMOS
Unique value proposition	▪ High quality carbon credits ▪ Assessed emissions reduction potential is 300,000 tCO2e/year ▪ Supported by an existing Methodology ▪ Strong sustainability qualities ▪ higher costs of toward waste management compared to backward tidying up.
Business Model	▪ It is already loan financed by ADB and thus may raise additionality concerns ▪ It is expected to be implemented on BOT basis without immediate considerations for revenues from the carbon market
Investment	▪ 40 million USD investment

Project Financials	
Project Cost **40 M USD**	**Project IRR** **4.4%**
Equity IRR 22.6%	**Payback** 10.8 years

Assumptions: 30% equity investment, 70% loans, at interest rate 3% per year; ITMO price: USD 15 per tCO2e; 18% host country fees; project crediting period: 15 years

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3. Brick Kilns Project

Opportunity Summary	
Ministry	▪ Ministry of Climate Change
Project description	▪ An Umbrella Project for Brick Kilns in Punjab ▪ An emissions reduction project ▪ The project encompasses 1000 out of 13000 small brick kilns ▪ Inherently programmatic so there is no reason to limit the number ▪ The projected costs per zig-zag kiln is 3 times higher than estimates in India, the efficiency gain is 15% compared to 20% in India, and the crediting period is set to 5 year instead of 10 ▪ Budget is only 30% of the total investment required – or alternatively, with Indian prices, the project covers the full cost of the conversion.
Market Dynamics	▪ Project characteristics would probably have significant appeal to government and corporate buyers alike ▪ Immense sustainable development benefits due to current air pollution
Unique value proposition	▪ High quality carbon credits ▪ Assessed emissions reduction potential is 370,000 tCO2e/year ▪ Extended cooperation and capacity building on both sides ▪ Supported by an existing Methodology ▪ Strong sustainability qualities
Business Model	▪ It is expected to be implemented on BOT basis without immediate considerations for revenues from the carbon market ▪ Private sector will be encouraged to participate
Investment	▪ 50 m USD

Project Financials

Project Cost 15 m USD	**Project IRR** **27.7%** Highly Scalable
Equity IRR 127%	**Payback** 0.8 years

Assumptions: 30% equity investment, 70% loans, at interest rate 8% per year; ITMO price: USD 15 per tCO2e; 18% host country fees; project crediting period: 10 years

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4. Biogas for Households in Khyber Pakhtunkhwa

	▪ Ministry of Climate Change
	▪ A Greenfield Investment in Biogas for households in KP ▪ An emissions reduction project ▪ Installation of 70,000 household size biogas digesters at the target households and provision of technical support for biogas digester installation and commissioning ▪ A PoA model which makes it scalable across the country ▪ Has potential in terms of gradual implementation and thus does not require the full implementation finance up front ▪ May be fully financed through carbon credits
	▪ It has strong sustainability qualities and may attract buyers. ▪ Immense sustainable development benefits due need for energy in rural areas
	▪ High quality carbon credits ▪ Assessed emissions reduction potential is 500,000 tCO2e/year ▪ Supported by an existing Methodology (CDM AM0075) ▪ Community based project which advances the uplift of poverty struck agriculture areas and families.
	▪ Community based project which advances the uplift of poverty struck agriculture areas and families. ▪ By capturing and utilizing methane, biogas technology reduces greenhouse gas emissions, mitigates climate change, and provides a sustainable energy source for rural communities.
	▪ 30 M USD

Project Financials

Project Cost 30 M USD	**Project IRR** 15.8%
Equity IRR 48.7%	**Payback** 2.1 years

Assumptions: 30% equity investment, 70% loans, at interest rate 3% per year; ITMO price: USD 15 per tCO2e; 18% host country fees; project crediting period: 10 years

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5. Generation of Mangrove Carbon Credits

Opportunity Summary	
Ministry	▪ Ministry of Climate Change
Project description	▪ A Greenfield Investment in Mangrove Carbon Credits Sindh-Port Qasim (Korangi & Phitti Creeks (62,833 ha), Balochistan-Sonmiani Khor, Kalmat Khor, Sahidi Khor, Sawar Khor, Shabi & Ankra Creeks, Jiwani (5690 ha) ▪ An emissions reduction project ▪ May be fully financed through carbon credits ▪ Stages: Signing of LOI, Development of PDD, Registration by International Body, Periodic monitoring, Offer of Credits etc
Market Dynamics	▪ It has strong sustainability qualities and may attract buyers ▪ In 2022, about **30%** of all carbon offset credits for forestry projects came from voluntary registries, including IFM, REDD+, and afforestation, among other types ▪ Data also suggests that in Asia and Central America, each credit for blue carbon projects costs the range between $13 – $35
Unique value proposition	▪ High quality carbon credits ▪ Supported by an existing Methodology ▪ Afforestation, conservation and regeneration of forests and green landscapes ▪ Improved resilience in terms of climate and environment ▪ Multiple co-benefits such as improved health, revenue generation, air quality and more
Business Model	▪ Hiring of consultant for feasibility assessment is under process through WB support.
Investment	▪ 522.5 M USD

Project Financials	
Project Cost 522.5 M USD	**Project IRR** 115.51%
Equity IRR 31%	**Payback** 1.5 years

Assumptions: 30% equity investment, 70% loans, at interest rate 3% per year; ITMO price: USD 15 per tCO_2e; 18% host country fees; project crediting period: 10 years

THANK YOU