



PROJECT TEASERS FOR INVESTMENTS IN PAKISTAN'S CARBON MARKETS

High level Visit from Kingdom of Saudi Arabia

9-11th December 2025

MINISTRY OF CLIMATE CHANGE &
ENVIRONMENTAL COORDINATION
GOVERNMENT OF PAKISTAN

Ministry of Climate Change & Environmental Coordination

1. Lakhodair Dumpsite (LWMC) Landfill Gas Recovery

Opportunity Summary		Project Financials	
Ministry	<ul style="list-style-type: none">Ministry of Climate Change	Project Cost 20 Million USD	Project IRR 15.01%
Project description	<ul style="list-style-type: none">A Greenfield Investment in Landfill Gas Recovery ProjectLandfill in use since 2016; existing waste about 20 million tons, receiving around 5000 tons per day		
Market Dynamics	<ul style="list-style-type: none">High demand for Methane Projects delivering ITMOSDistribution of methanized landfill gas through the existing natural gas supply system in LahoreIt has strong social, environmental, and health co-benefits		
Unique value proposition	<ul style="list-style-type: none">High quality Carbon creditsEstimation of 350,000 reduction tCO2e per year for 10-15 yearsSupported by an existing CDM MethodologyThe project may thus comfortably be fully financed through carbon credits	Equity IRR 30% equity investment, IRR =57.4%	Payback 4.5 years
Business Model	<ul style="list-style-type: none">It might be offered to an investor on a BOT basis where the return on the investment could be a guaranteed issuance of ITMOsDistribution 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	<ul style="list-style-type: none">20 m USD, which means an abatement cost of 1.7-2.5 USD/tCO2e		
		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		Project Financials	
Ministry	<ul style="list-style-type: none">Ministry of Climate Change	Project Cost 40 M USD	Project IRR 4.4%
Project description	<ul style="list-style-type: none">A Greenfield Investment in Landfill ProjectIntegrated waste management projects in four cities		
Market Dynamics	<ul style="list-style-type: none">The project does not include methane capture of legacy wasteHigh demand for Methane Projects delivering ITMOS		
Unique value proposition	<ul style="list-style-type: none">High quality carbon creditsAssessed emissions reduction potential is 300,000 tCO2e/yearSupported by an existing MethodologyStrong sustainability qualitieshigher costs of toward waste management compared to backward tidying up.	Equity IRR 22.6%	Payback 10.8 years
Business Model	<ul style="list-style-type: none">It is already loan financed by ADB and thus may raise additionality concernsIt is expected to be implemented on BOT basis without immediate considerations for revenues from the carbon market	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	
Investment	<ul style="list-style-type: none">40 million USD investment		

3. Brick Kilns Project

Opportunity Summary		Project Financials	
Ministry	<ul style="list-style-type: none">Ministry of Climate Change	Project Cost 15 m USD	Project IRR 27.7% Highly Scalable
Project description	<ul style="list-style-type: none">An Umbrella Project for Brick Kilns in PunjabAn emissions reduction projectThe project encompasses 1000 out of 13000 small brick kilnsInherently programmatic so there is no reason to limit the numberThe 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 10Budget is only 30% of the total investment required – or alternatively, with Indian prices, the project covers the full cost of the conversion.		
Market Dynamics	<ul style="list-style-type: none">Project characteristics would probably have significant appeal to government and corporate buyers alikeImmense sustainable development benefits due to current air pollution	Equity IRR 127%	Payback 0.8 years
Unique value proposition	<ul style="list-style-type: none">High quality carbon creditsAssessed emissions reduction potential is 370,000 tCO2e/yearExtended cooperation and capacity building on both sidesSupported by an existing MethodologyStrong sustainability qualities		
Business Model	<ul style="list-style-type: none">It is expected to be implemented on BOT basis without immediate considerations for revenues from the carbon marketPrivate sector will be encouraged to participate	<div>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</div>	
Investment	<ul style="list-style-type: none">50 m USD		

4. *Biogas for Households in Khyber Pakhtunkhwa*

	<ul style="list-style-type: none">Ministry of Climate Change
	<ul style="list-style-type: none">A Greenfield Investment in Biogas for households in KPAn emissions reduction projectInstallation of 70,000 household size biogas digesters at the target households and provision of technical support for biogas digester installation and commissioningA PoA model which makes it scalable across the countryHas potential in terms of gradual implementation and thus does not require the full implementation finance up frontMay be fully financed through carbon credits
	<ul style="list-style-type: none">It has strong sustainability qualities and may attract buyers.Immense sustainable development benefits due need for energy in rural areas
	<ul style="list-style-type: none">High quality carbon creditsAssessed emissions reduction potential is 500,000 tCO2e/yearSupported by an existing Methodology (CDM AM0075)Community based project which advances the uplift of poverty struck agriculture areas and families.
	<ul style="list-style-type: none">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.
	<ul style="list-style-type: none">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

5. Generation of Mangrove Carbon Credits

Opportunity Summary	
Ministry	<ul style="list-style-type: none">Ministry of Climate Change
Project description	<ul style="list-style-type: none">A Greenfield Investment in Mangrove Carbon Credits Sindh-Port Qasim (Korangi & Phitti Creeks (62,833 ha), Balochistan-Sonmiani Khor, Kalamat Khor, Sahidi Khor, Sawar Khor, Shabi & Ankra Creeks, Jiwani (5690 ha)An emissions reduction projectMay be fully financed through carbon creditsStages: Signing of LOI, Development of PDD, Registration by International Body, Periodic monitoring, Offer of Credits etc
Market Dynamics	<ul style="list-style-type: none">It has strong sustainability qualities and may attract buyersIn 2022, about 30% of all carbon offset credits for forestry projects came from voluntary registries, including IFM, REDD+, and afforestation, among other typesData also suggests that in Asia and Central America, each credit for blue carbon projects costs the range between \$13 – \$35
Unique value proposition	<ul style="list-style-type: none">High quality carbon creditsSupported by an existing MethodologyAfforestation, conservation and regeneration of forests and green landscapesImproved resilience in terms of climate and environmentMultiple co-benefits such as improved health, revenue generation, air quality and more
Business Model	<ul style="list-style-type: none">Hiring of consultant for feasibility assessment is under process through WB support.
Investment	<ul style="list-style-type: none">522.5 M USD

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

6. Generation of Mangrove Carbon Credits (ITMOs)

Opportunity Summary	
Ministry	<ul style="list-style-type: none">Ministry of Climate Change
Project description	<ul style="list-style-type: none">Balochistan-Sonmiani Khor, Kalmat Khor, Sahidi Khor, Sawar Khor, Shabi & Ankra Creeks, Jiwani (5690 ha)An emissions reduction projectMay be fully financed through carbon creditsStages: Signing of LOI, Development of PDD, Registration by International Body, Periodic monitoring, Offer of Credits etcStages: Signing of LOI, Development of PDD, Registration by International Body, Periodic monitoring, Offer of Credits etc.
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Business Model	<ul style="list-style-type: none">Hiring of consultant for feasibility assessment is under process through WB support.
Investment	<ul style="list-style-type: none">47.99 M USD

Project Financials	
Project Cost	Project IRR
47.99 M USD	114.03
Equity IRR	Payback
47%	1.8 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: 10 years

THANK YOU