

BRIEF

Name of Project: "Composting of Organic Content of Municipal Solid Waste in Lahore, Pakistan." Version 01.

Objectives:

- The objective of the project is produce organic fertilizer from solid municipal organic waste. It uses state of the art aerobic windrow type composting technology to produce organic fertilizer. The compost is instrumental in reducing environmental degradation of the soil by replenishing organic content in the soil. Decomposition of solid municipal organic waste mainly results in methane emissions. Composting reduces methane emissions into ambient air and atmosphere and contributes towards sustainable development.
- To help in achieving the objectives of combating climate change under UNFCCC by reducing significant amount of greenhouse gas (Methane) emissions and contributes to the regional and national sustainable development.

Date of Submission: July, 07th 2008

Submitted by: Lahore Compost (Pvt) Limited

Project Sponsors: Lahore Compost (Pvt) Limited
IBRD as trustee of the Danish Carbon Fund
Saif Holdings Limited

Detail of Total Project Cost:

Description	Amount in US \$
Plant & machinery	2791000.590
Civil work & land development	2481000.228
Furniture & fittings	64000.956
Others	186000.501
Grant Total	5,524,275
Total amount in PKR	38,500,0000
Total amount in US \$ (million)	5.5

Estimated Emission Reduction:

<u>Source</u>	<u>Tons of CO₂eq/ yr</u>
Municipal Solid Waste	78,344
Total annual reduction:	78,344

Operational Lifetime: 25 years.

Starting/Commissioning Date:

01/01/2008

Crediting/Validity Period:

- Kyoto first commitment period: 2008-12
- Estimated validity period (Including Post Kyoto period): 2008-33

Economic Viability of the Project:

Internal Rate of Return (IRR):

Without CDM benefits: 13.18%

With CDM benefits: 18.38%

Benefits from the Project:

Activity	Revenue (US\$) million/annum
Sale of Carbon Credits (@ US\$ 11/tonnes of CO _{2eq}):	0.858
Sale of 5591 Metric tones Compost /Year (@ Rs.250 per 50 kg bag)	0.94
Total estimated annual revenue:	1.798

Other Qualitative Benefits:

- The project Produces cheap organic fertilizer which improves per hectare yield. Thus promoting farmers' income and contributing to economic sustainable development of the region.
- The Project will help in transfer of modern technology (state of art Menart technology) and increases skilled labour opportunities and created about 80 full-time jobs at the project plant.
- The project would also promote sustainable development of Lahore Municipality by improving the environment quality and demonstrate the commercialized practice of composting that could assist Pakistan's central and southern regions and other countries in meeting the objectives regarding re-use of waste.
- The project has created new economic activities for everyone involved in the value chain.
- The project activity helps in reducing GHG (methane) emission levels in the environment. Additionally it would reduce the amount of waste going into the landfill thus increasing the lifespan of the waste landfill.
- The organic fertilizer of Lahore Compost is a substitute of expensive chemical fertilizer. While reducing the expenditure incurred on chemical fertilizer, it affords small farm owners same level of crop yield.
- The compost produced by Lahore Compost is far less expensive than locally manufactured as well as imported fertilizer (urea, DAP, etc) and compost. It complements as well as substitutes chemical fertilizer.