



**Project design document form for
CDM project activities
(Version 08.0)**

Environmental aspects and other contribution of the project activity towards Sustainable Development locally and in the whole host-country Brazil:

The project activity promotes a significant positive impact towards sustainable development in Brazil.

First, while reducing methane emissions, it also minimizes the risk of explosions in the landfill site (although the CR do Recreio's engineering and design specifically aims to avoid these types of accidents).

Secondly, given the fact that at the time of the project design initial conceptualization, initiatives of this type were relatively new in Brazil, at that time it was assumed that the implementation and operation of the project activity would represent a significant technology transfer¹.

Thirdly, while specialized operators are needed for the project operation, that represents positive impact in terms of employment and capacity-building in the region. The aforementioned elements concur in making the project extremely vital in the context of sustainable development.

While the project activity also encompasses generation of electricity from a non-conventional renewable energy source, the installation and operation of the project's electricity generation facility also represents promotion of additional local job opportunities (for building and operating the project's electricity generation facility). The project's electricity generation facility fuelled by LFG is expected to be used as a relevant technological demonstration initiative in the Southern region of Brazil for the promotion of electricity generation using non-conventional renewable energy source. The use of LFG as fuel for electricity generation is still not common practice in Brazil. It is the intention of the project participant to establish cooperation agreements with local NGOs, academia and community in order to demonstrate and promote this type of initiative.

GHG emission reductions to be achieved by the project activity during the 2nd 7 year crediting period: The project activity is expected to promote total GHG emission reductions of 3,428,594 tCO₂e during the 2nd 7-year renewable crediting period. This value is equivalent to an average annual GHG emission reduction of 489,799 tCO₂e/year.

¹ In July 2015 there were 45 LFG project based initiatives encompassing collection and destruction and/or utilization implemented or under implementation or yet to be implemented in Brazil. All these initiatives were/are to be implemented as CDM project activities.