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Management of municipal water and sanitation in Latin America and the Caribbean with a climate change perspective. Project approaches
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Abstract

Climate change is recognized as one of the more serious potential threats to the environment. Municipal wastes are significant contributors to greenhouse gases emissions through decomposition and life-cycle activities processes. Wastewater management has not been yet seriously considered as potential part of the Clean Development Mechanism (CDM) projects. A reason is a matter of scale and mass of organic carbon involved. However, the number of facilities is very high, and their added contributions represent an important source of greenhouse gases (GHG).

There is an opportunity to identify wastewater treatment technologies processes that may have low carbon footprints in order to contribute for mitigating the climate change impacts of the Latin American and Caribbean (LAC) region. Moreover, the lack of treatment infrastructure in the region is an opportunity for choosing more sustainable technologies when deciding the construction of new treatment facilities.

This research project evaluates the state of LAC wastewater systems and also explores possibilities to identify alternatives for more effective and sustainable wastewater treatment, based on Life Cycle Assessment (LCA) methodology.