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## **Sustainable Wastewater management in Egypt Based on Life Cycle Approach**

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Researchers from Germany and Egypt have cooperated since December 2006 to elaborate a new strategy for the wastewater treatment system in Egypt to be operated under ecological and economical conditions. This will enhance the performance of the public owned treatment works (POTWs) towards sustainable discharge of high quality treated wastewater re-use and high quality sludge disposal for better utilizations. Life Cycle Approach (LCA) is applied in this project to provide excessive system analysis for the wastewater systems and identify the performance of all processes through the whole life cycle.

Since the beginning of the project, the qualitative and quantitative analysis of sewage sludge produced from POTWs and its disposal has been achieved, together with the investigation of sludge characteristics and creation of a research group for the Environment system analysis wastewater treatment using innovative LCA approach. For the completion of the project, the creation of the most advanced laboratory in the area of the Delta, for chemical analysis of waste water is planned, together with the introduction of the principles of LCA and the ERP to the people of Dakahlia Water and Sanitary Drainage Company.

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