



<p>Project name:</p> <p>Technical, commercial and financial feasibility study for a methanisation power plant using water hyacinth from the Niger river</p>	<p>Approx. value of the contract</p> <p>Phase 1 (feasibility studies): 80 kUS\$ Phase 2: (detailed studies): 300 kUS\$</p>
<p>Country: Mali</p> <p>Location within country: Bamako - Koulikoro</p>	<p>Duration of assignment:</p> <p>Phase 1 (feasibility study): 2009-2012 Phase 2 (detailed study): 2014- 2020</p>
<p>Name of Beneficiary/Client:</p> <p>Government of Mali (Ministère de l'environnement et de l'Assainissement)</p> <p>EDM (Electricité du Mali)</p>	<p>Project Partners:</p> <p>REPIC (Renewable Energy & Energy Efficiency Promotion in International Cooperation), Switzerland</p> <p>E.R.A (Expérience Rurale Alternative), Mali</p>
<p>Total No. of staff-months of the assignment:</p> <p>Phase 1: 5 months Phase 2: 15 months (expected)</p>	<p>Names of Planair staff members involved in the project:</p> <p>Lionel Perret, Martine Felber, Pierre Renaud, Jean-Loup Robineau</p>
<p>Description of Project:</p> <p>Phase 1: Technical, commercial and financial feasibility study for a methanisation power plant using water hyacinth from the Niger river.</p> <p>The main objective of this study was to assess the possibility of harvesting the invasive water hyacinth locally and to generate profit through its energetic and biological potential. The plants shall be collected by a specially developed machine, gasified in a biogas plant and in the end converted into electricity. The resulting fertilizer will be used for the regeneration of agricultural soils. The feasibility study includes the biogas plant's dimensioning and engineering, the operation planning and profitability calculations. Expected input: 80'000 t biomass/year, expected output: 10 GWh/year.</p> <p>Phase 2: Detailed study for the Design of a pilot plant</p> <p>After that the implementation of the project was temporary stopped due to the military coup and war situation. The new government had confirmed his willingness to proceed with the implementation phase to Planair/E.R.A during a visit in Bamako on Oct 2014. Phase 2 of the project was definitively commissioned in July 2016 and includes data collection, demand assessment, technical pilot plant design, integration to grid, business plan, acquisition of permits and authorisations in collaboration with local authorities.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	