Carbon-dioxide – methane (carbon) cycle and its application

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CO2 sequestration in geological formation is currently paid attention for the reduction of greenhouse gas emission. There are young and thick sediments having methane gas field. These water-soluble methane gases are impregnated in sediment layers with reduction environment. The methanogenic bacteria are a strong candidate to generate methane from CO2. On the other hand, the suitable management system of the waste gases from the big burn refuse plants, e.g. the electric power plants using coal and refused derived fuel (RDF), is necessary to make. We would like to make a model system of carbon-methane cycle.