**Supplementary - Figure captions**

Figure Suppl. 1. Principal components analysis (PCA) shows the association between physicochemical parameters, removal percentages, biogas production, and treatments used in BMP test. T1: substrate/inoculum ratio of 0.36 g COD/g VSS, T2: substrate/inoculum ratio of 0.62 g COD/g VSS. A, B and C represent the replicates from each treatment.