**Supplementary - Figure captions**

**Figure Suppl. 1.** Mean (± SD) cumulative methane production for T1 and T2 (*n* = 3). T1: substrate/inoculum ratio of 0.36 g COD/g VSS, T2: substrate/inoculum ratio of 0.62 g COD/g VSS.

**Figure Suppl. 2.** 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.