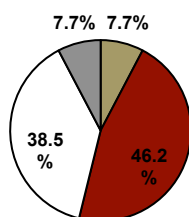


(a)

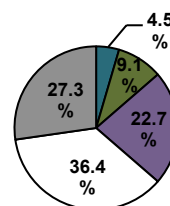
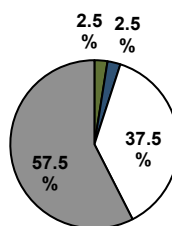
[FeFe] hydrogenase

[NiFe] hydrogenase

no
detection**(b)**

ACD/ACSS

AckA

*Azoarcus**Sulfuricella**Ramlibacter**Variovorax**Burkholderia**Curvibacter*

Other genera

Unclassified *Betaproteobacteria*

Figure S4. Taxonomic composition at the genus level of the betaproteobacterial transcripts relevant to hydrogen generation ([FeFe] hydrogenase, [NiFe] hydrogenase) (a) and acetate generation (ACD/ACSS; acetyl-CoA decarbonylase/synthase, ackA; acetate kinase) (b) in D layer of the W6 period. Data are shown as means of three replicates.