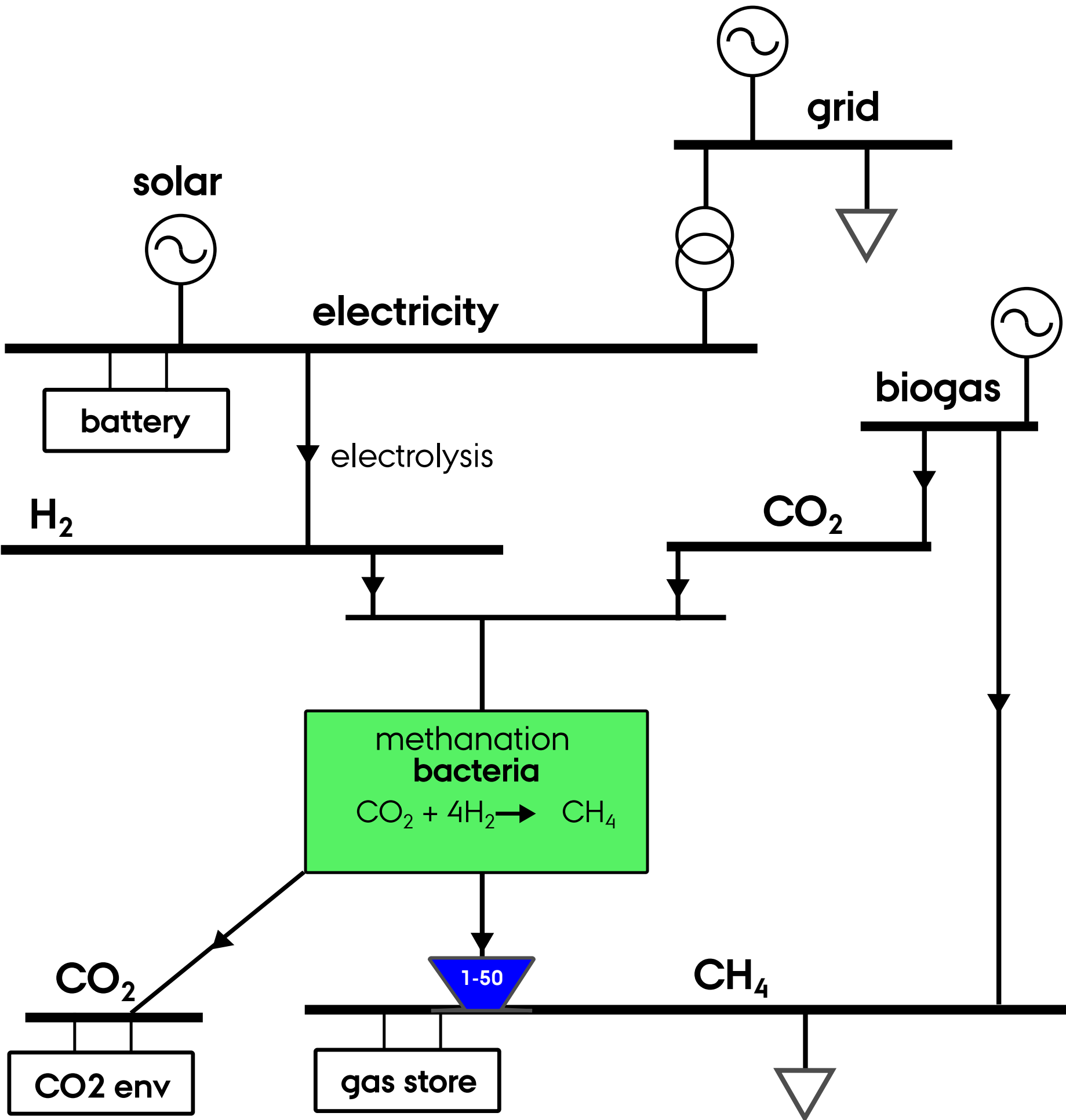


APPLAUSE project meeting

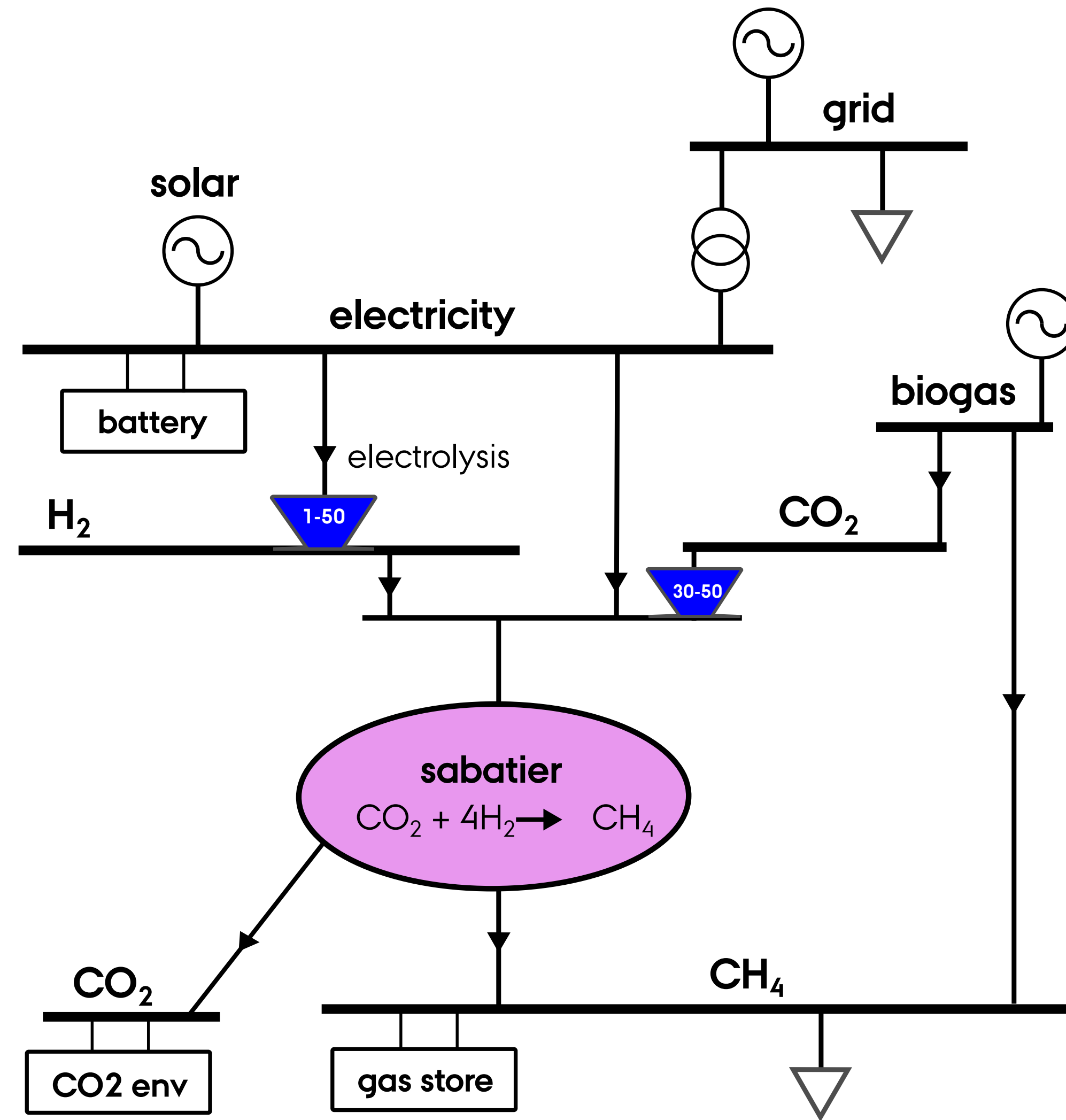
4 November

Model

Methanogens



Model Sabatier



Cost assumptions

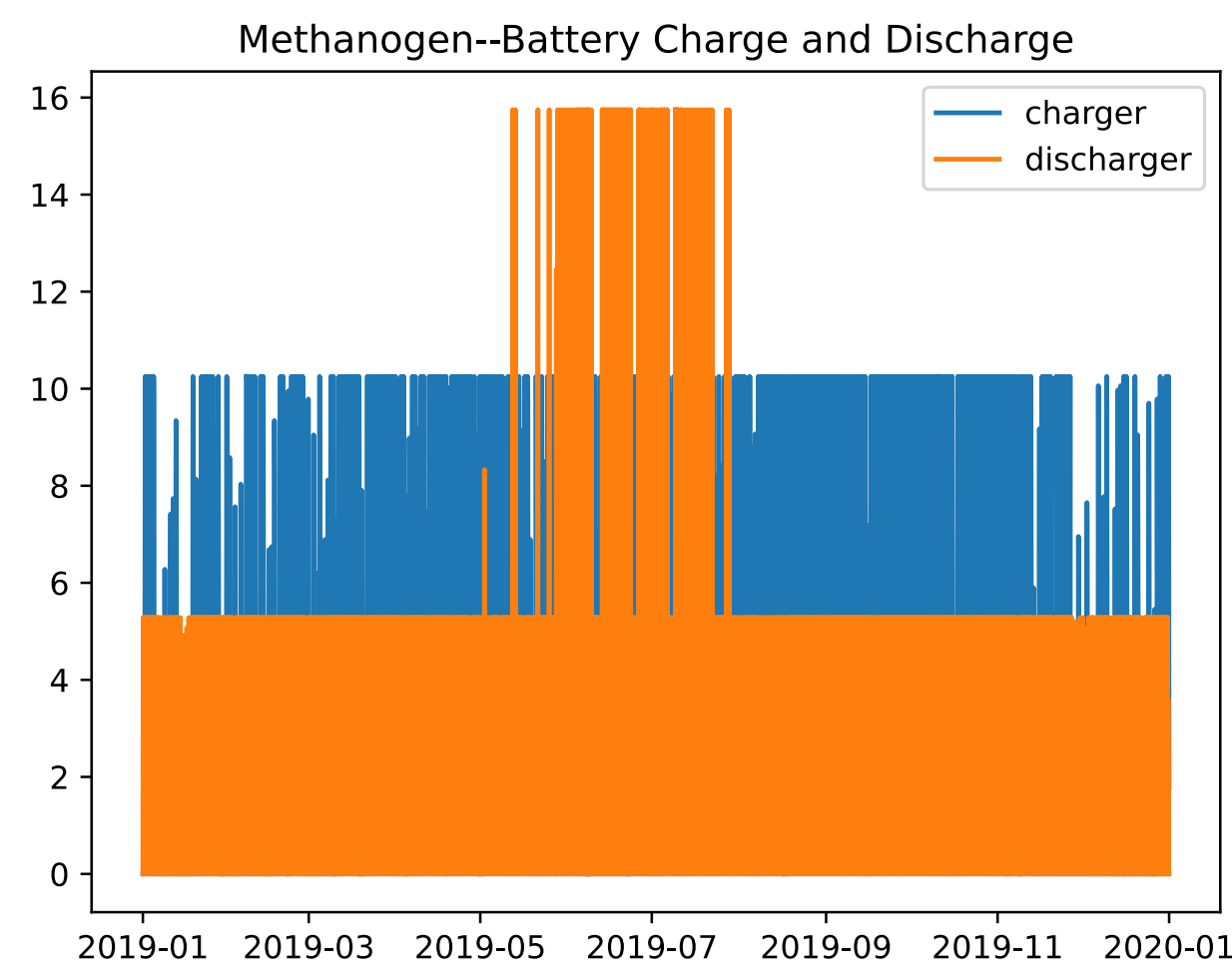
S1. Cost assumptions

Table S1: Efficiency, lifetime and FOM cost per technology (values shown corresponds to 2020).

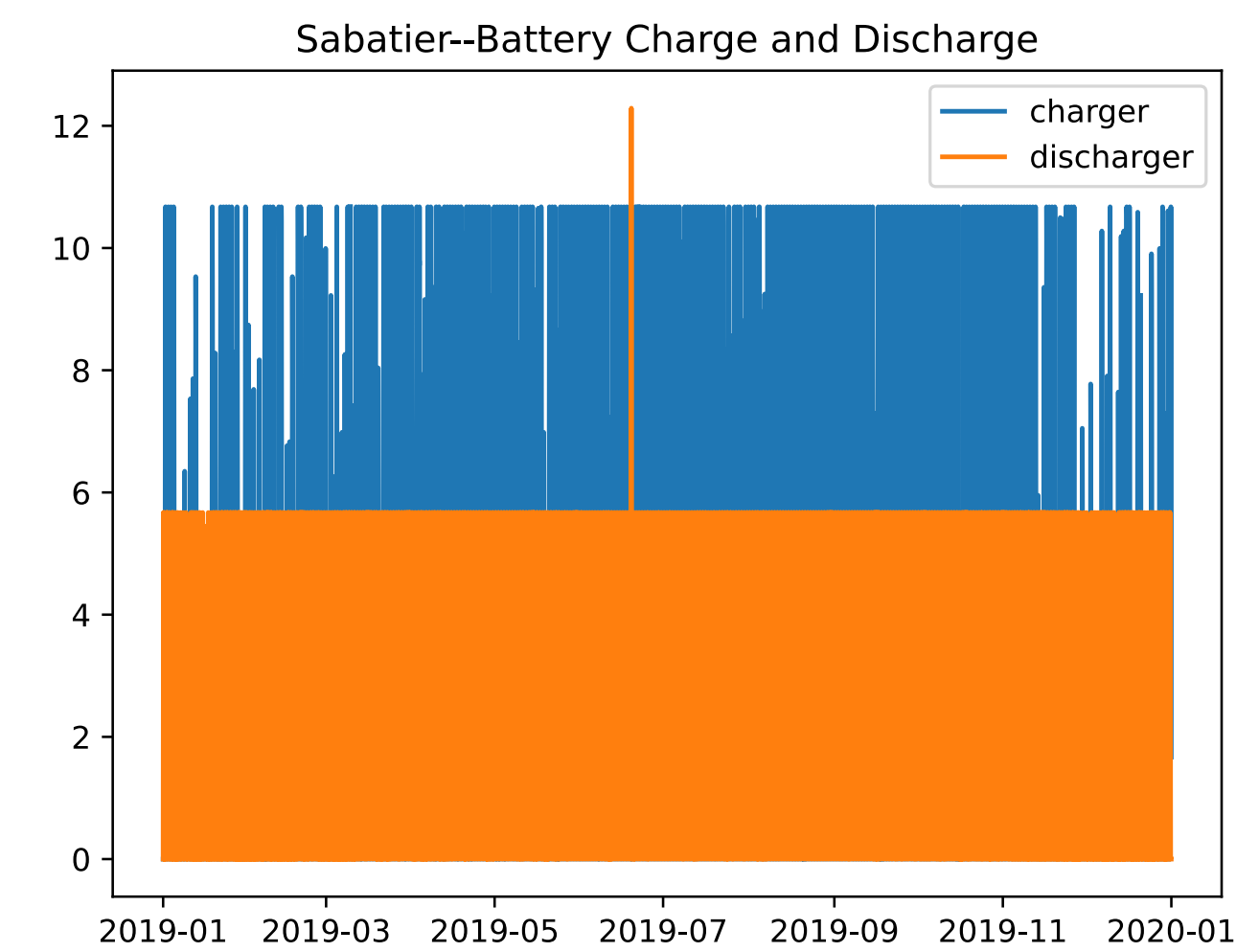
Technology	Unit [%/a]	2025 Cost [a]	FOM ^a	Lifetime	Efficiency	Source
Solar PV (utility-scale)	€/kW	452	1.6	35		[1]
Battery storage	€/kWh	187		20		[1]
Battery inverter	€/kW	215	0.2	10	0.95	[1]
Electrolysis	€/kW _{el}	550	2.0	25	0.66	[1]
Methanation	€/kW _{CH4}	278	4.0	30	0.8	[2]
methanogens	€/kW _{CH4}	834	4.0	30	0.8	
biogas generator	€/kW _{CH4}	0			0.9	
CO2 storage	€/kWh	0				
gas storage	€/kWh	0				

Results

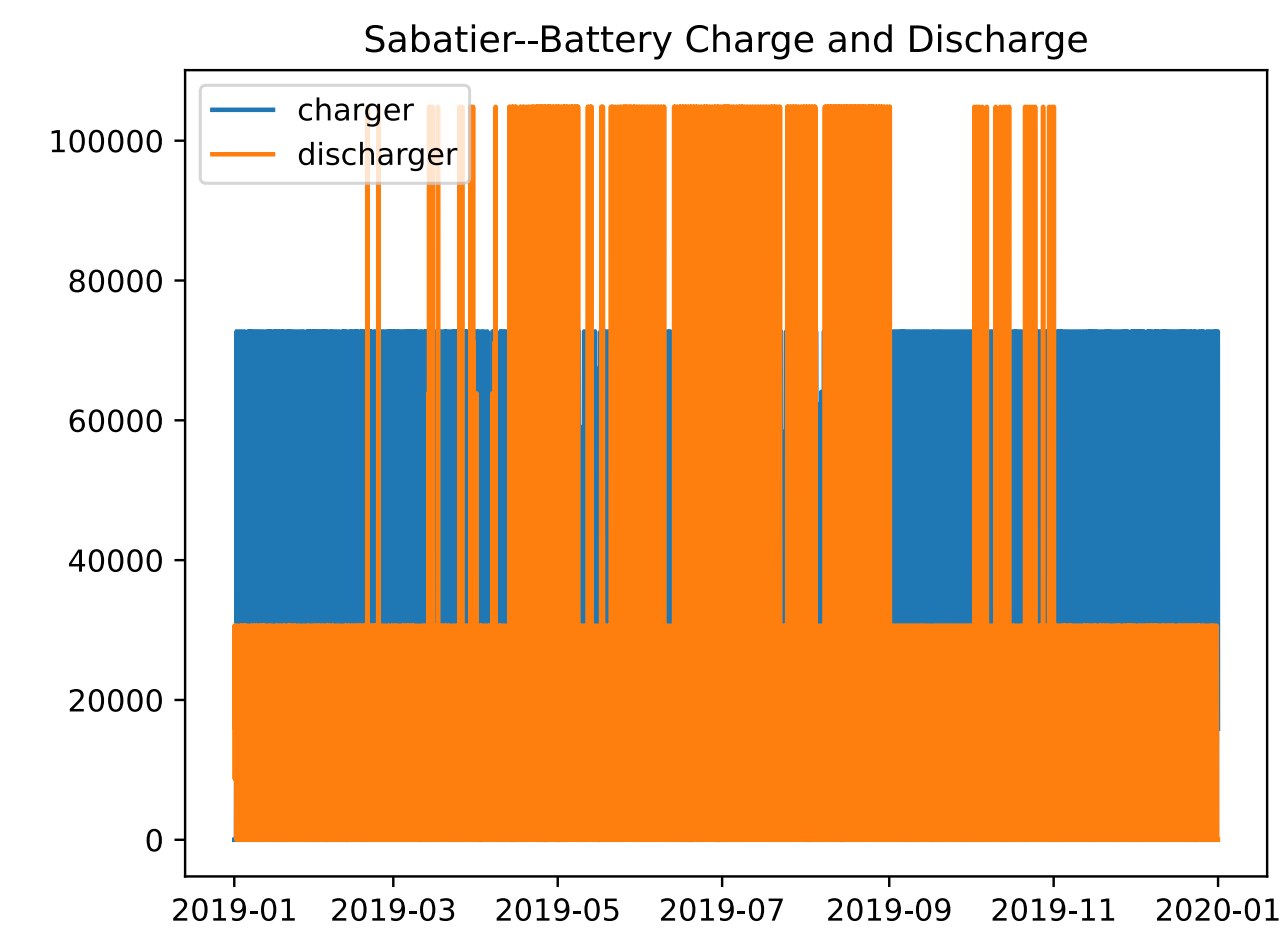
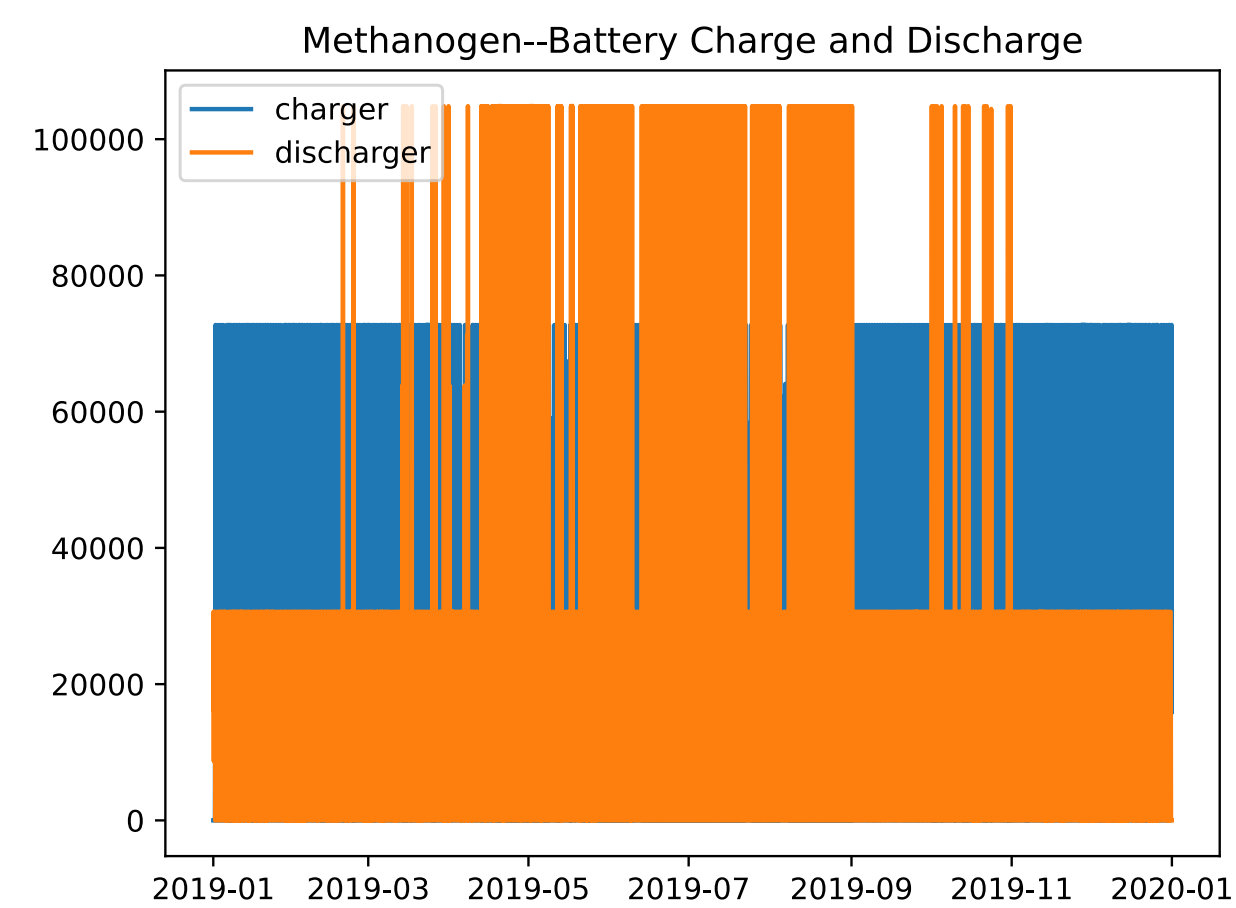
no grid



battery inverters



grid

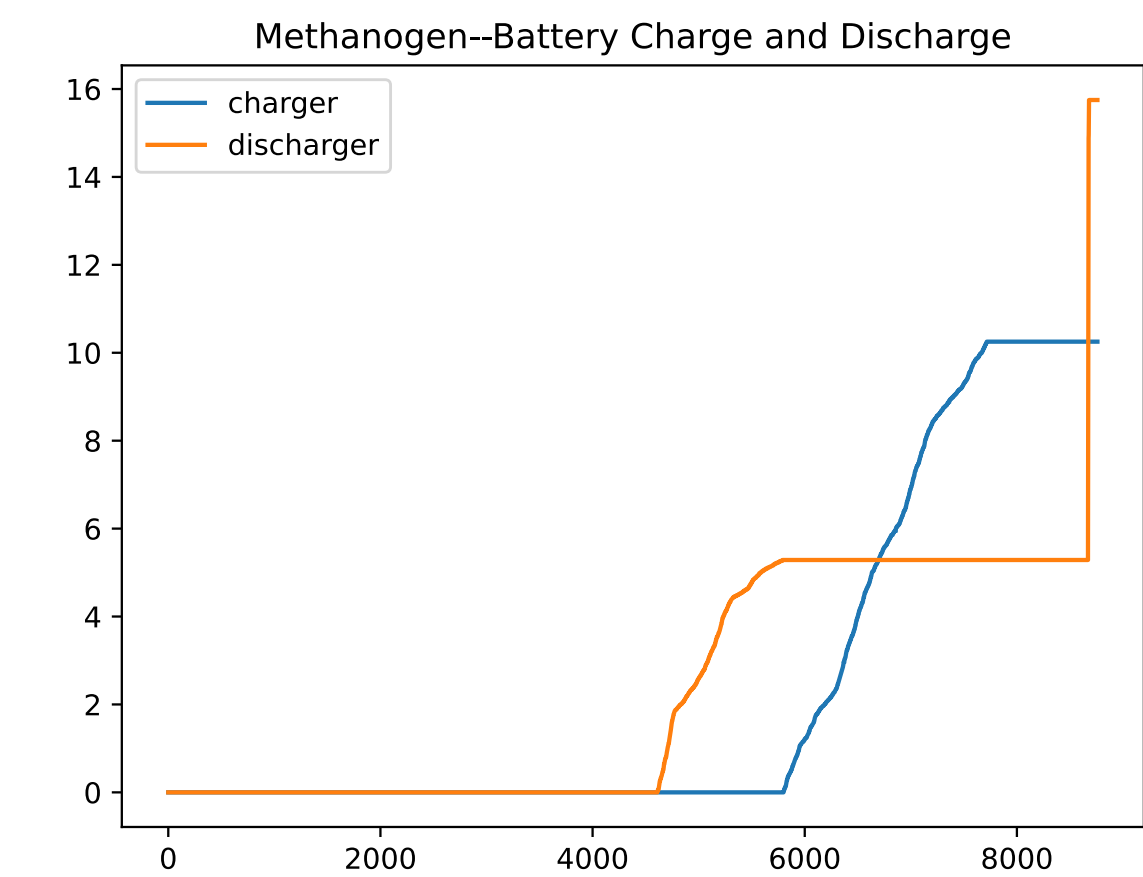


methanogen

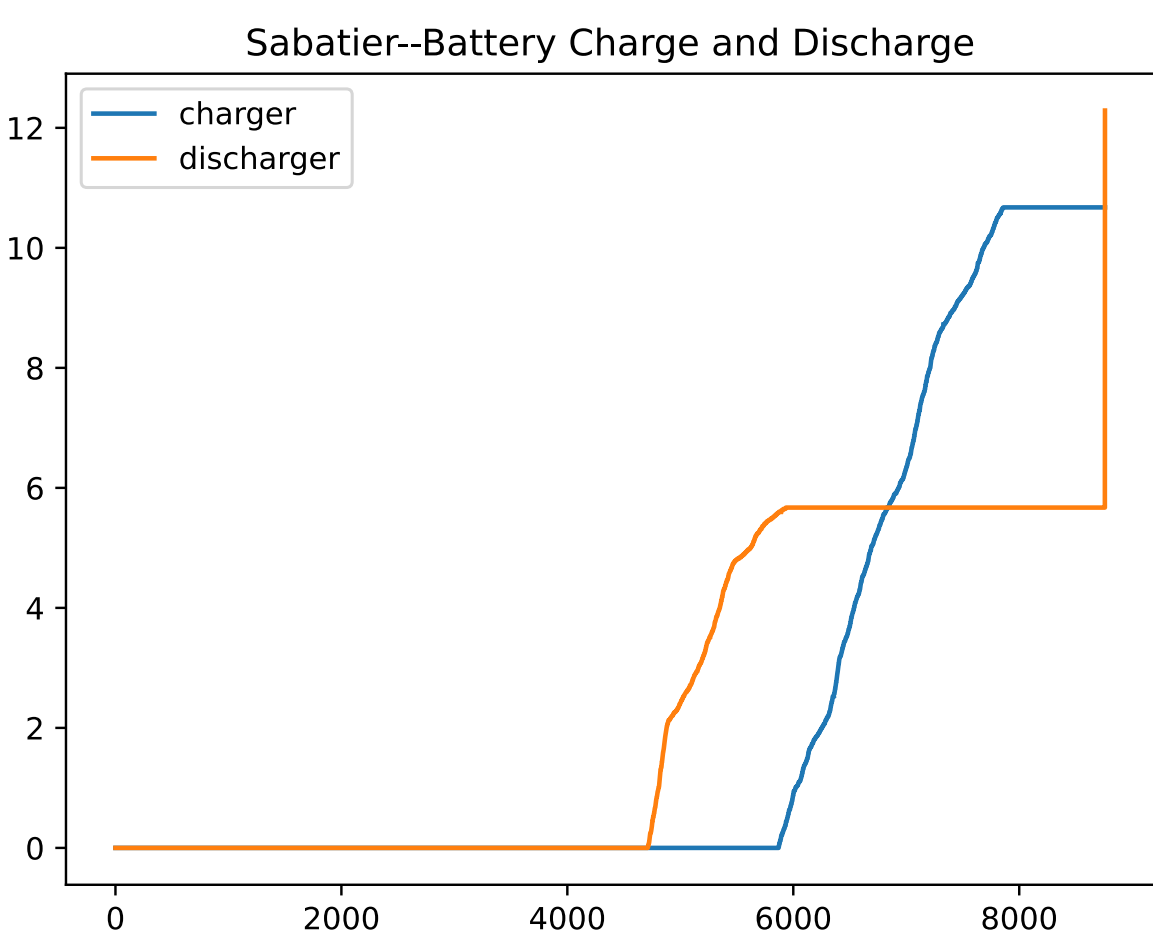
sabatier

Results

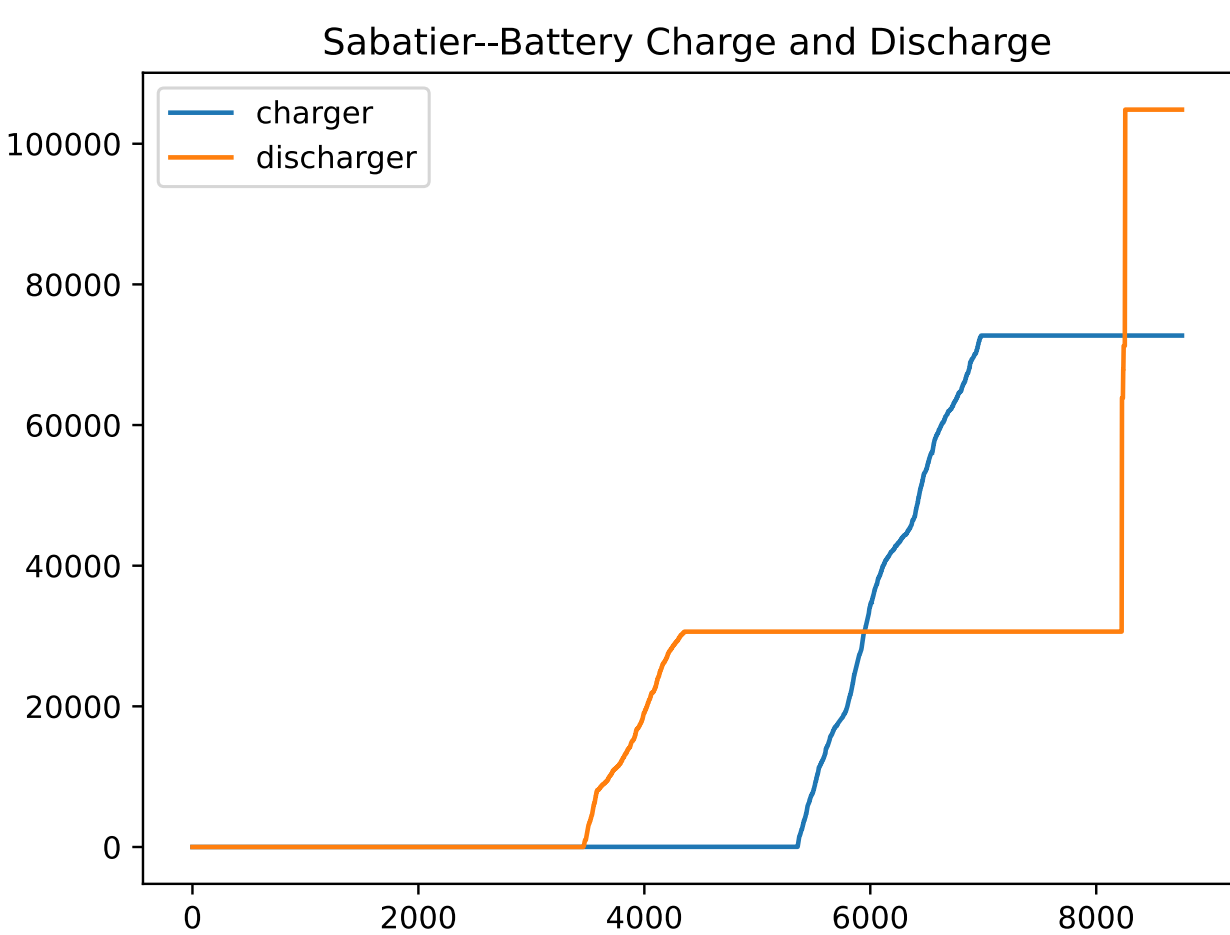
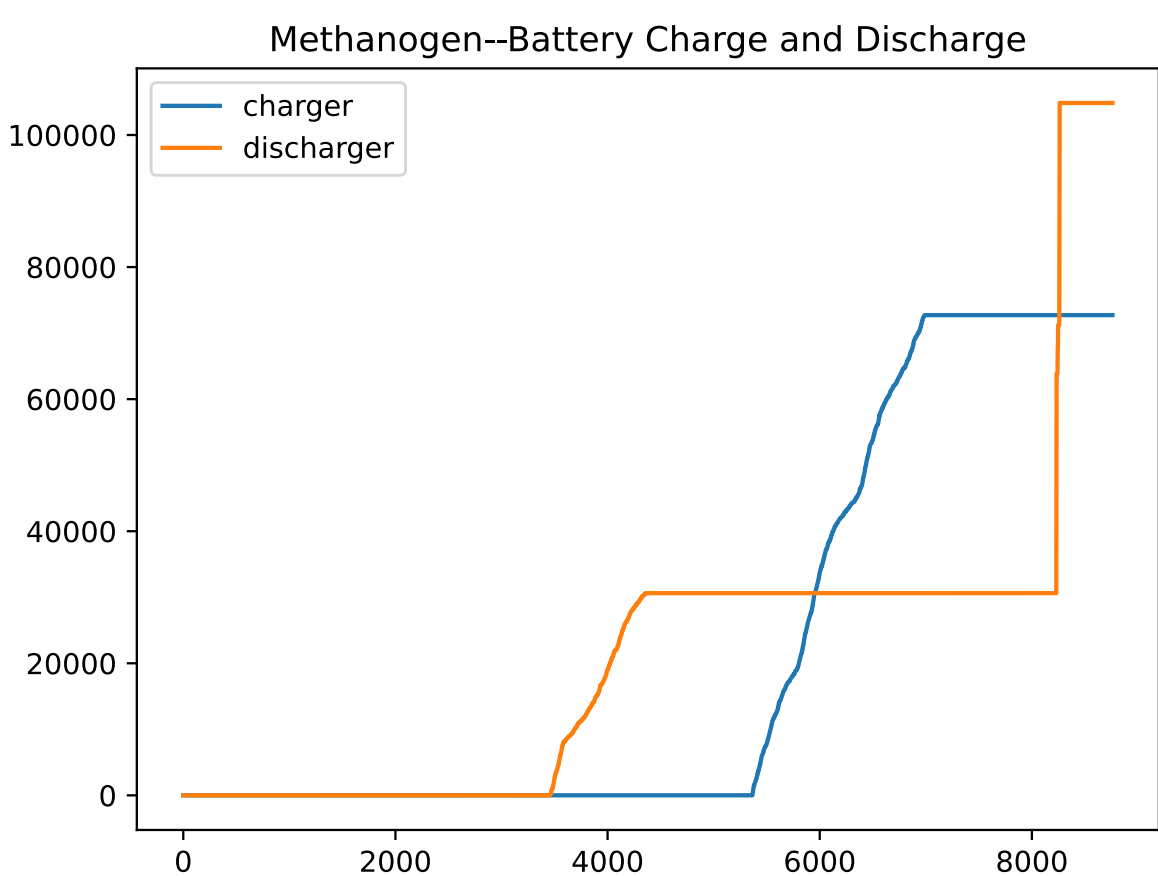
no grid



battery inverter dcurve



grid

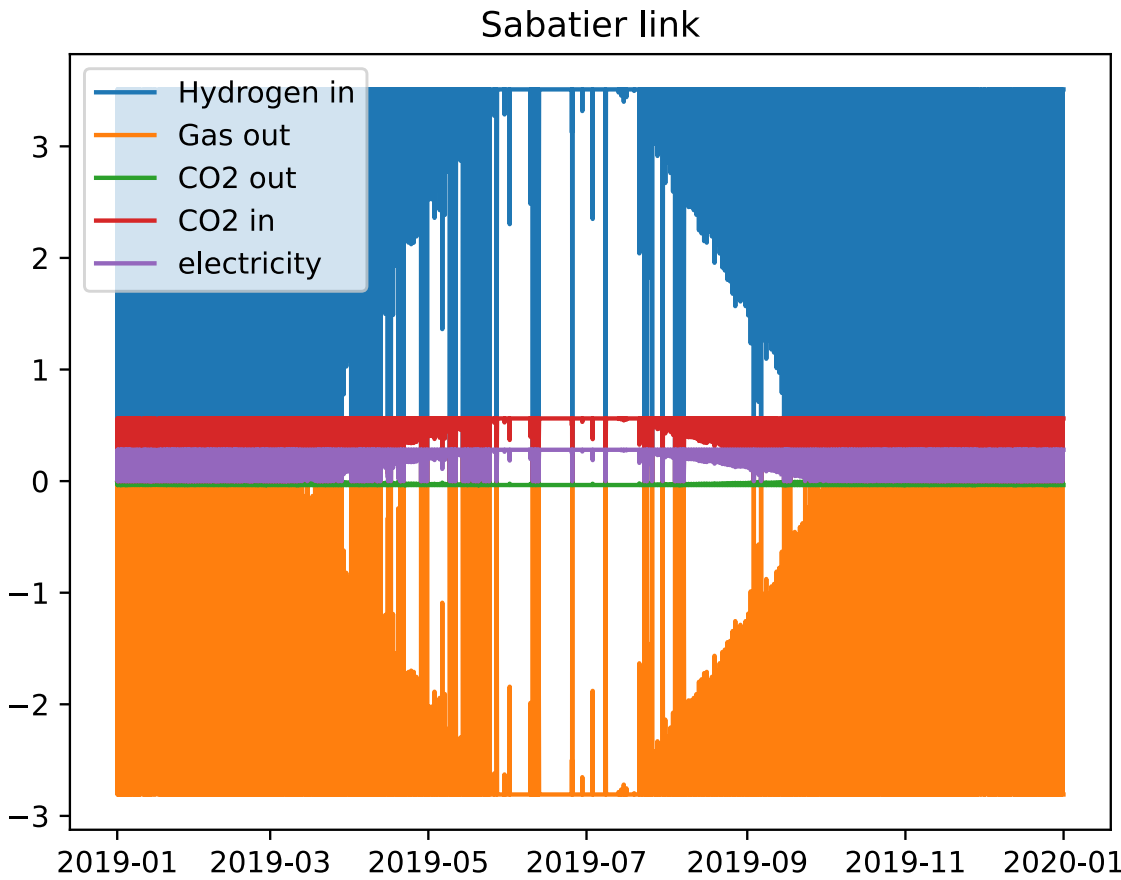
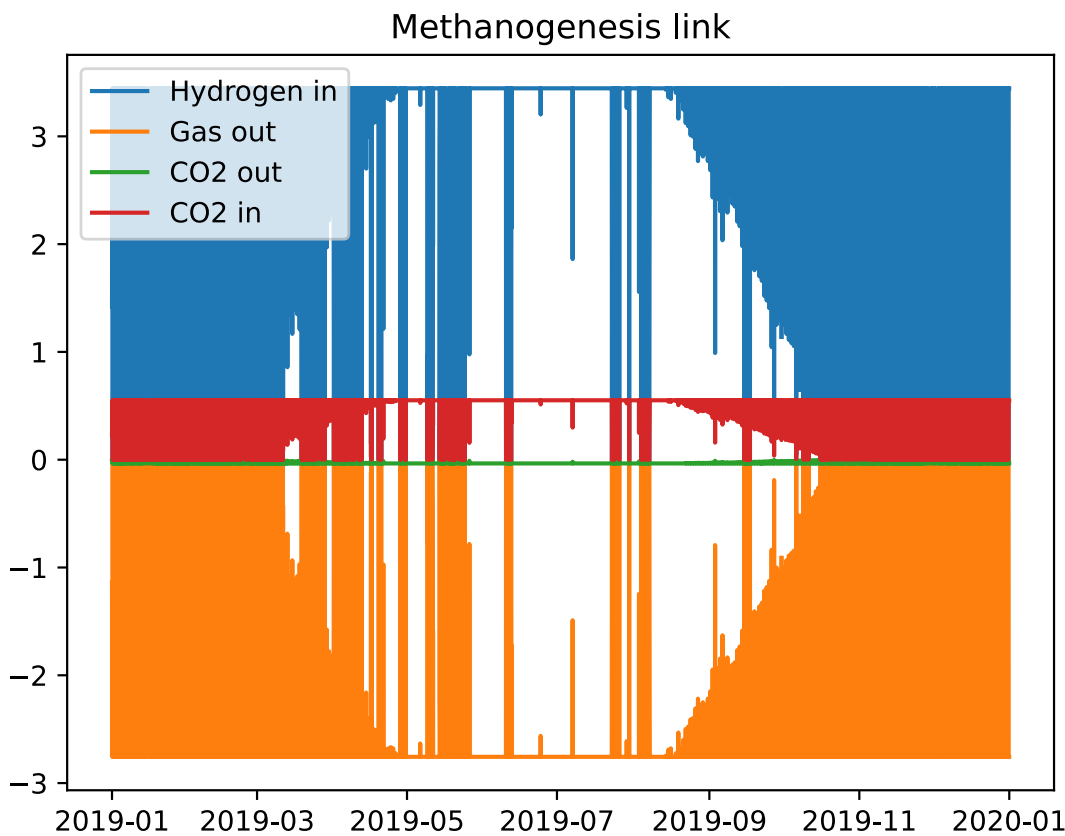


methanogen

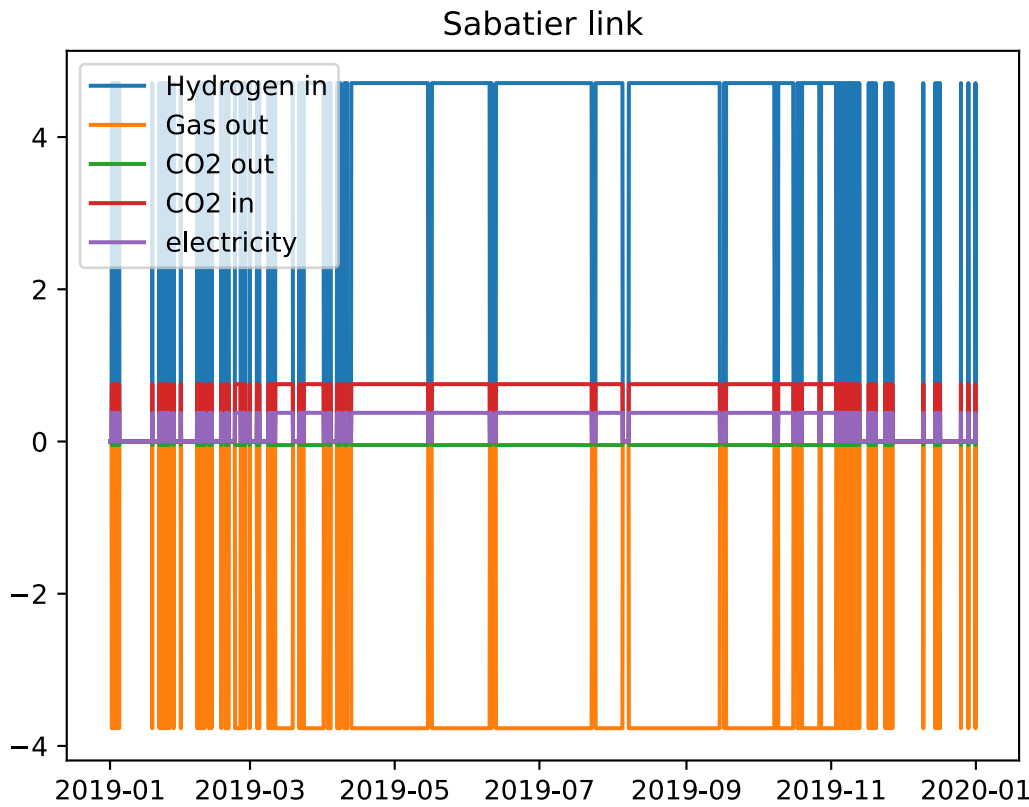
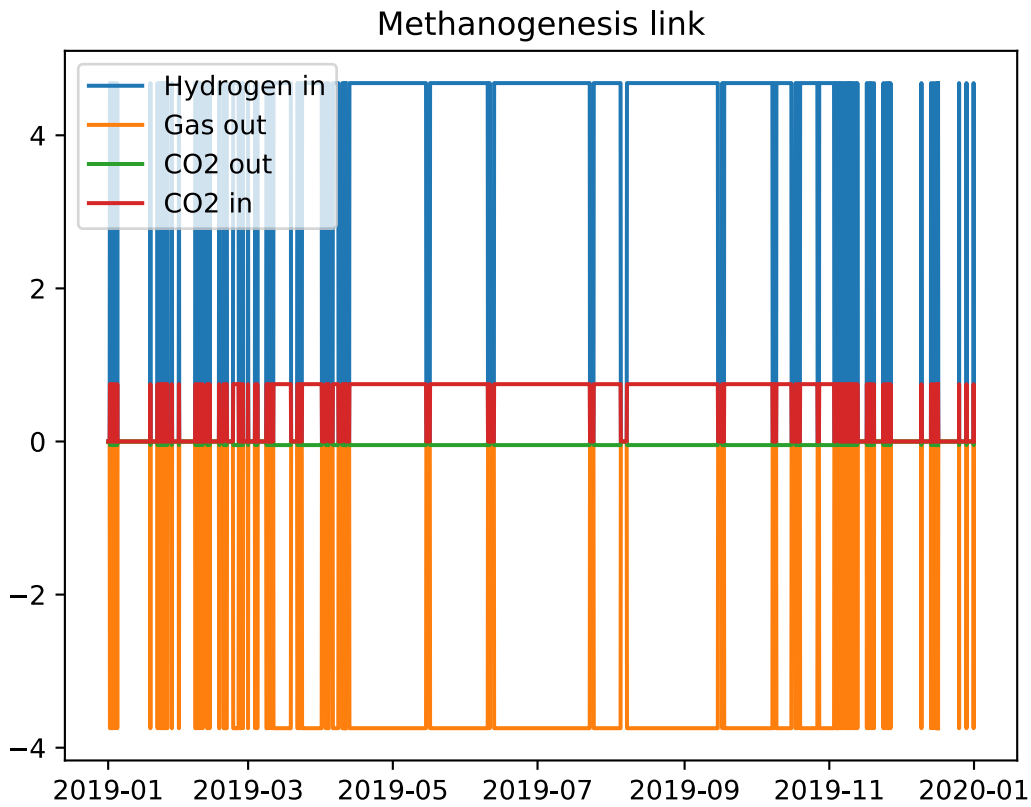
sabatier

Results

no grid



grid



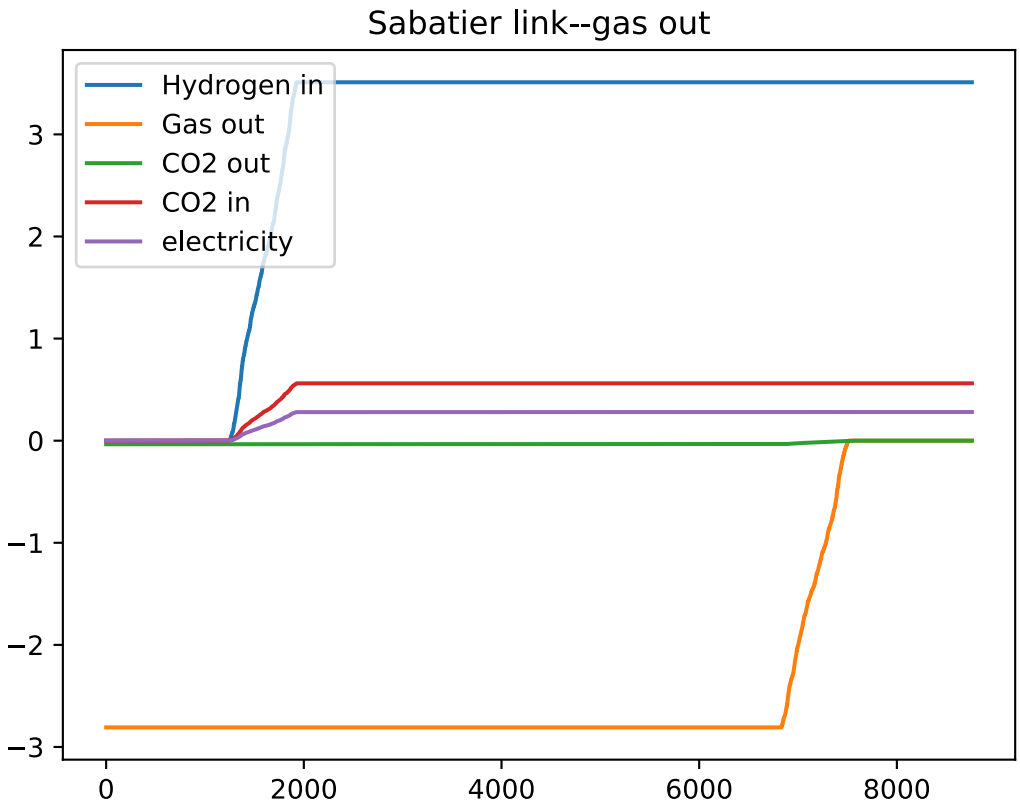
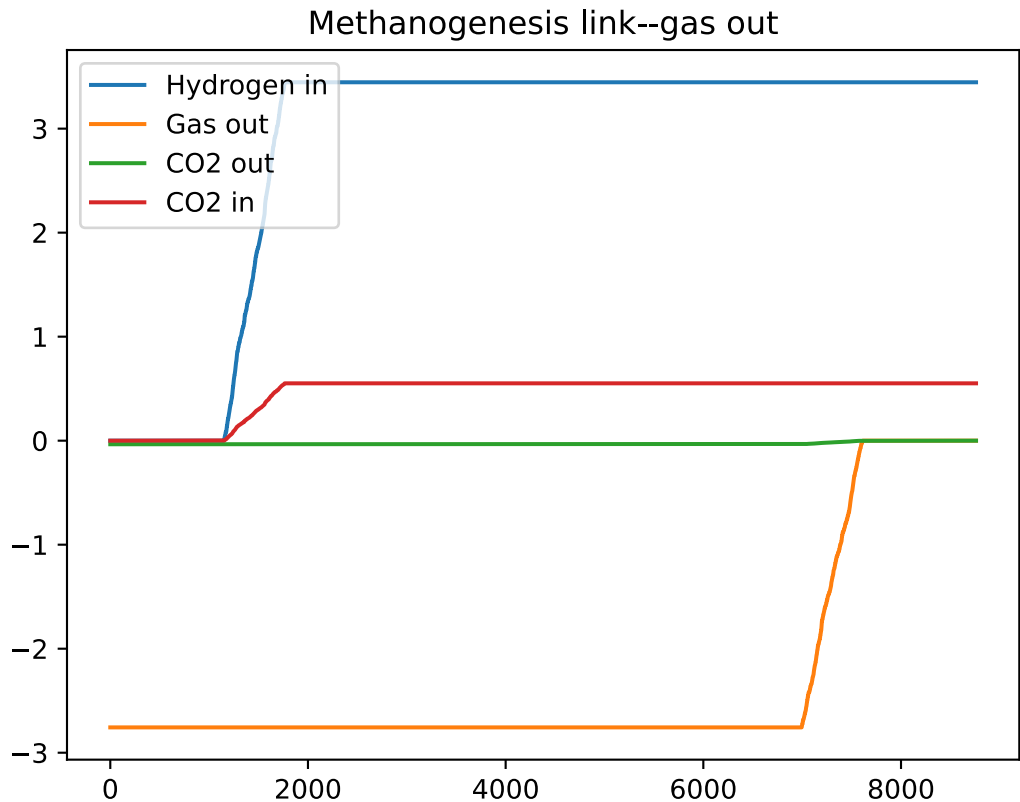
methanogen

sabatier

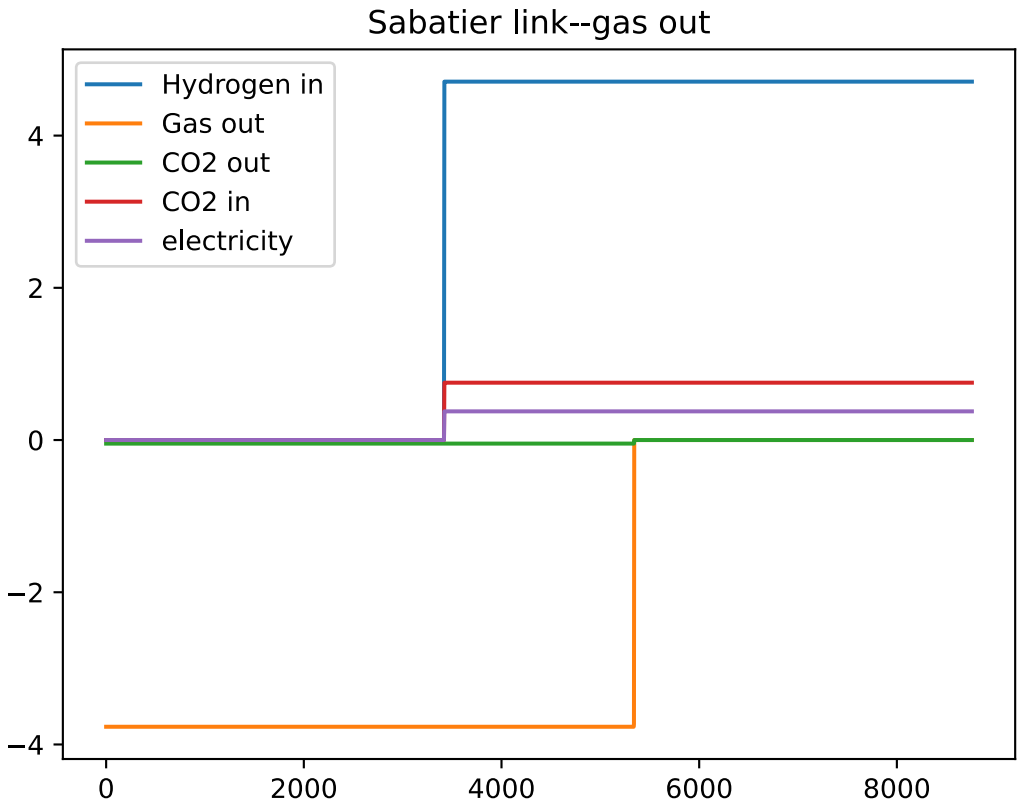
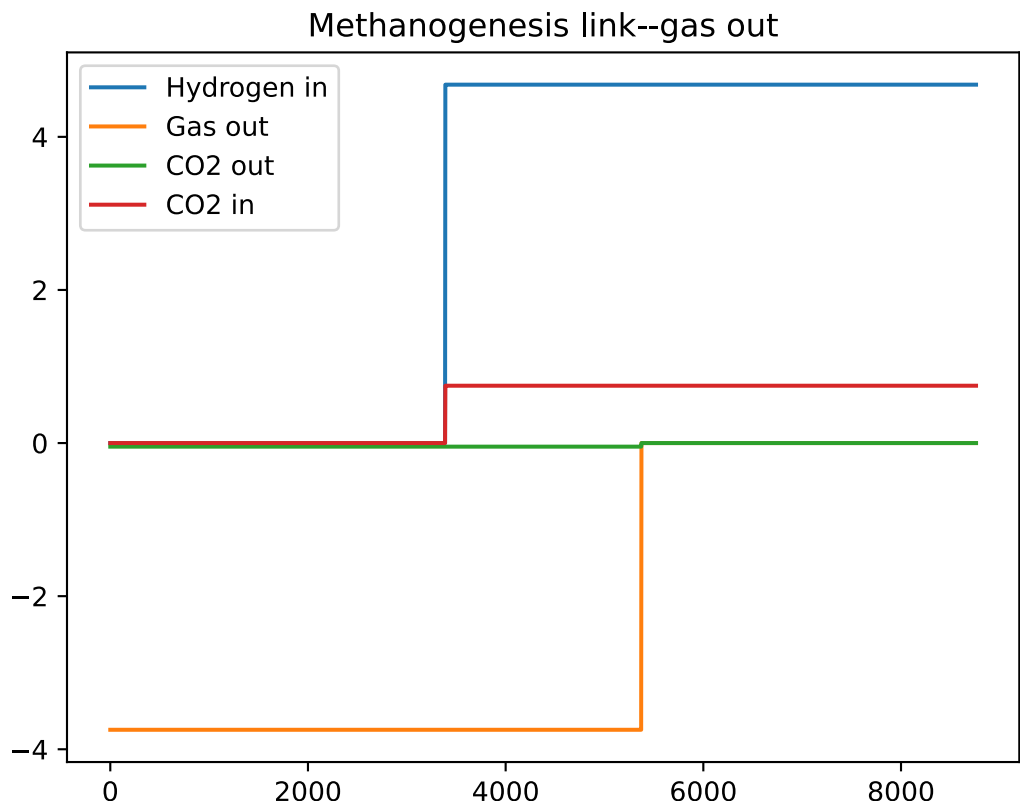
methanation

Results

no grid



grid



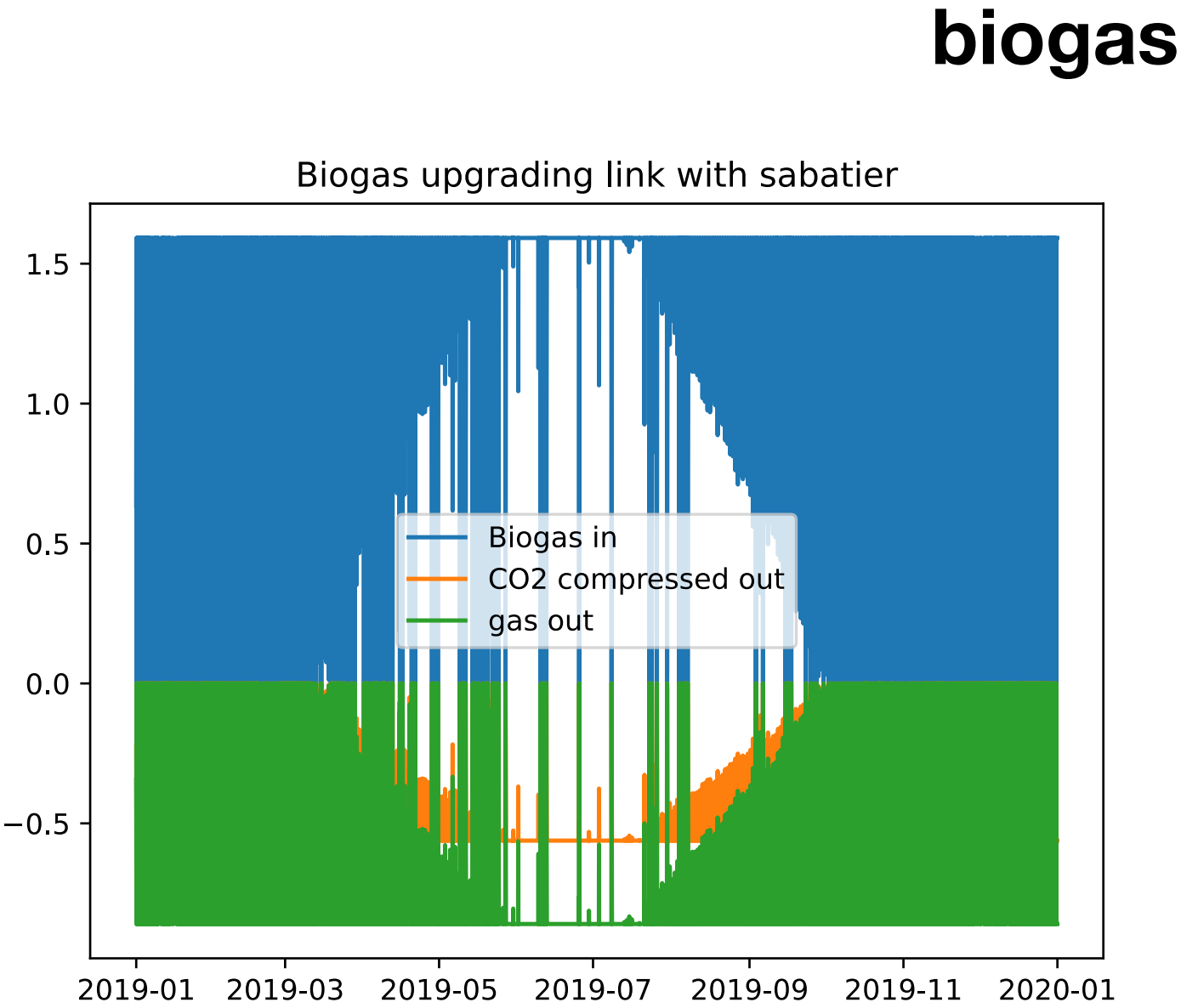
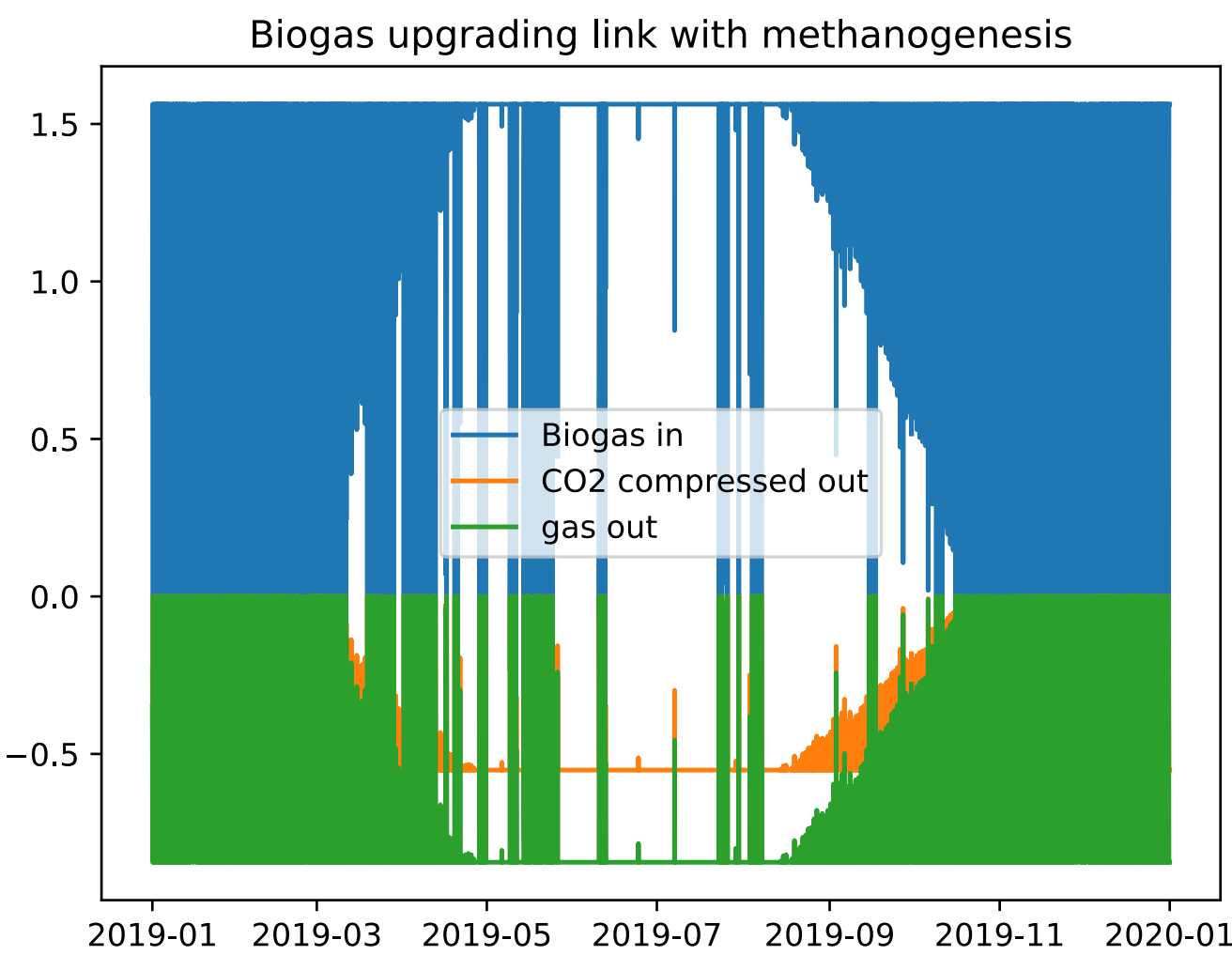
methanogen

sabatier

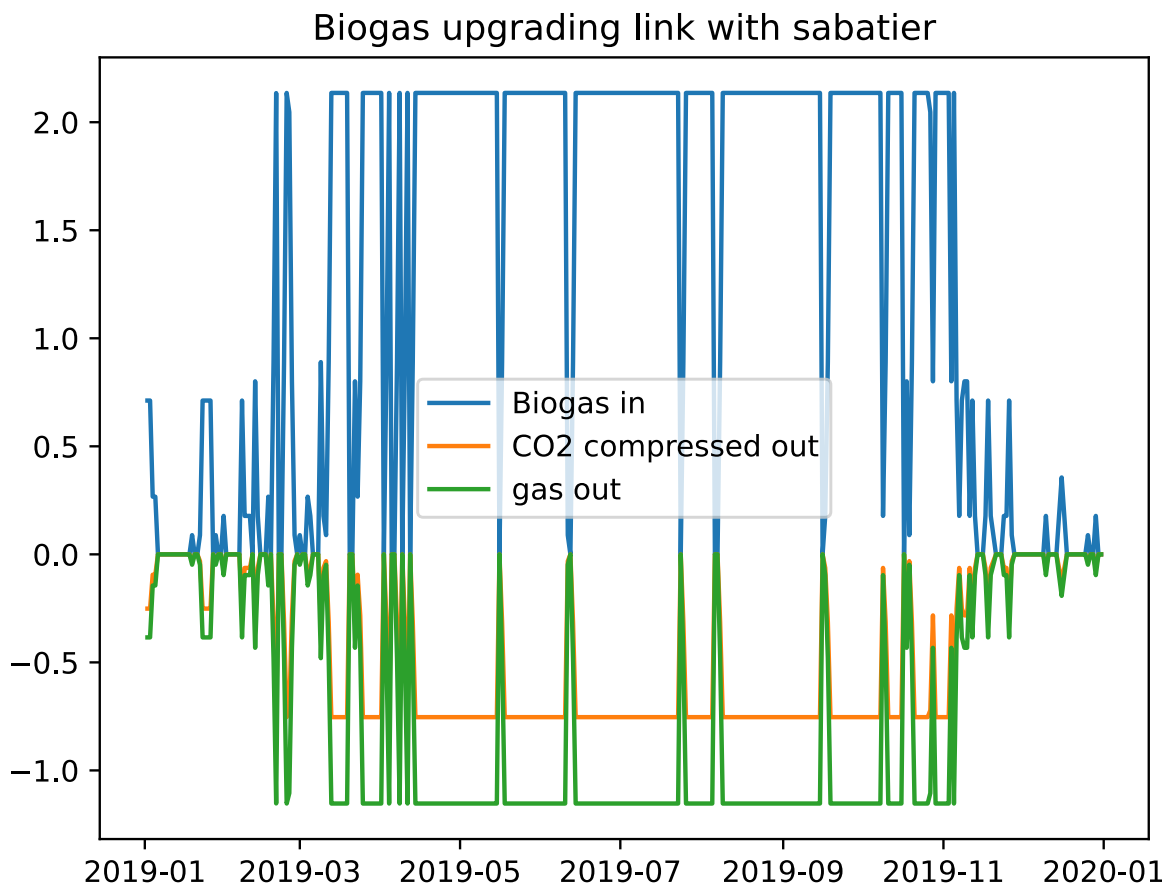
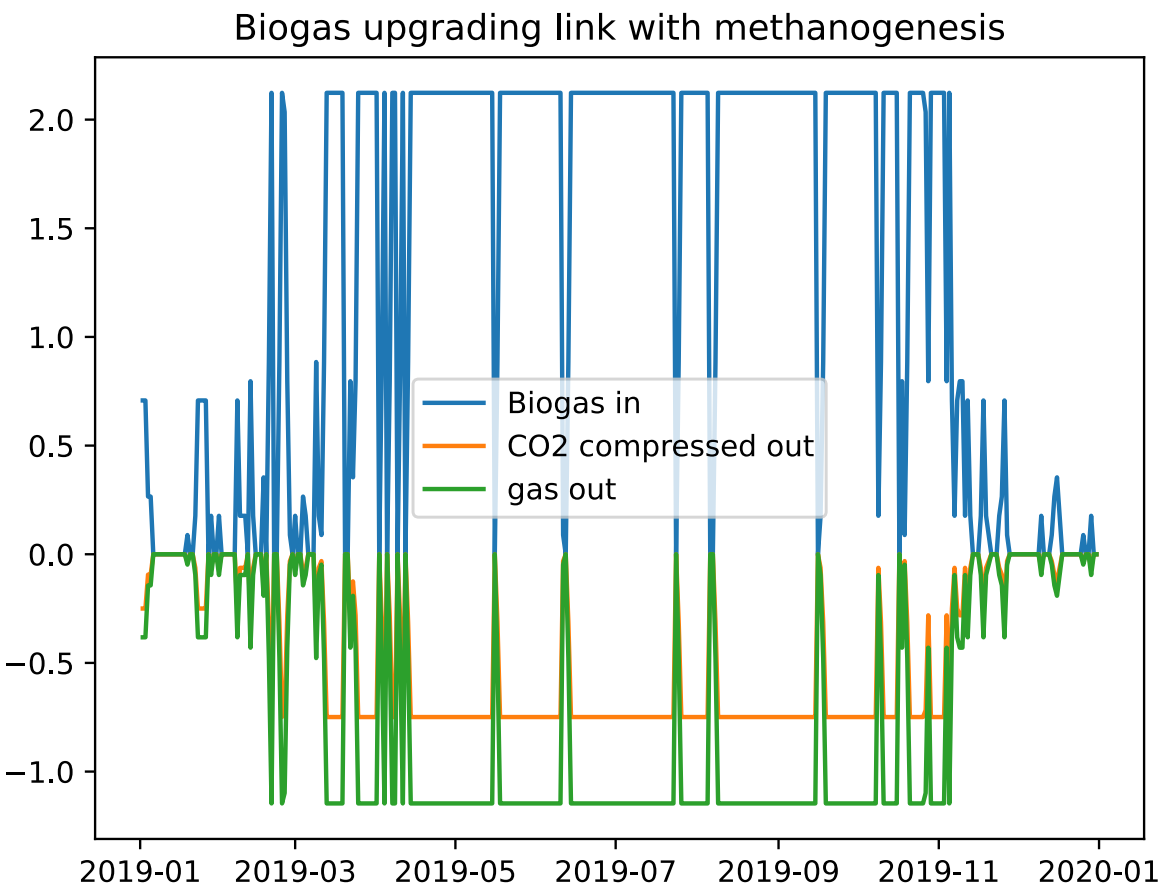
methanation dcurve

Results

no grid



grid

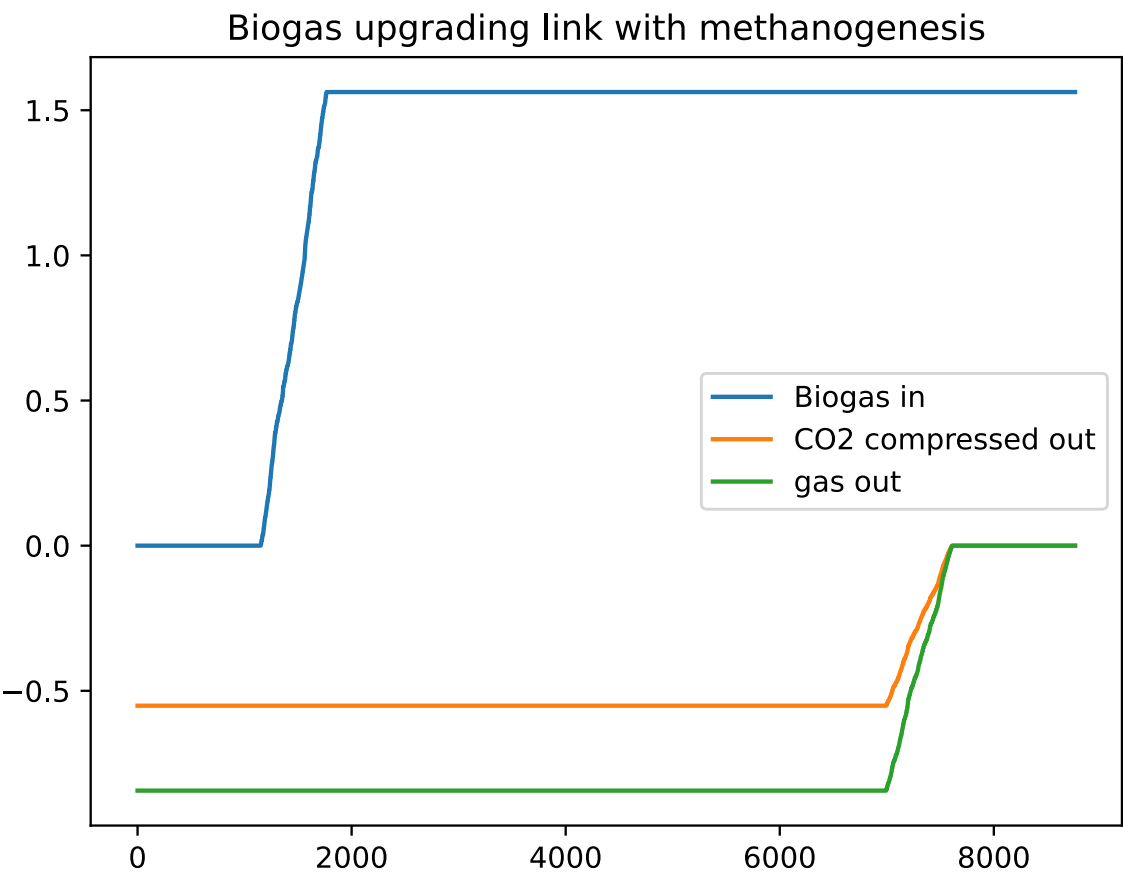


methanogen

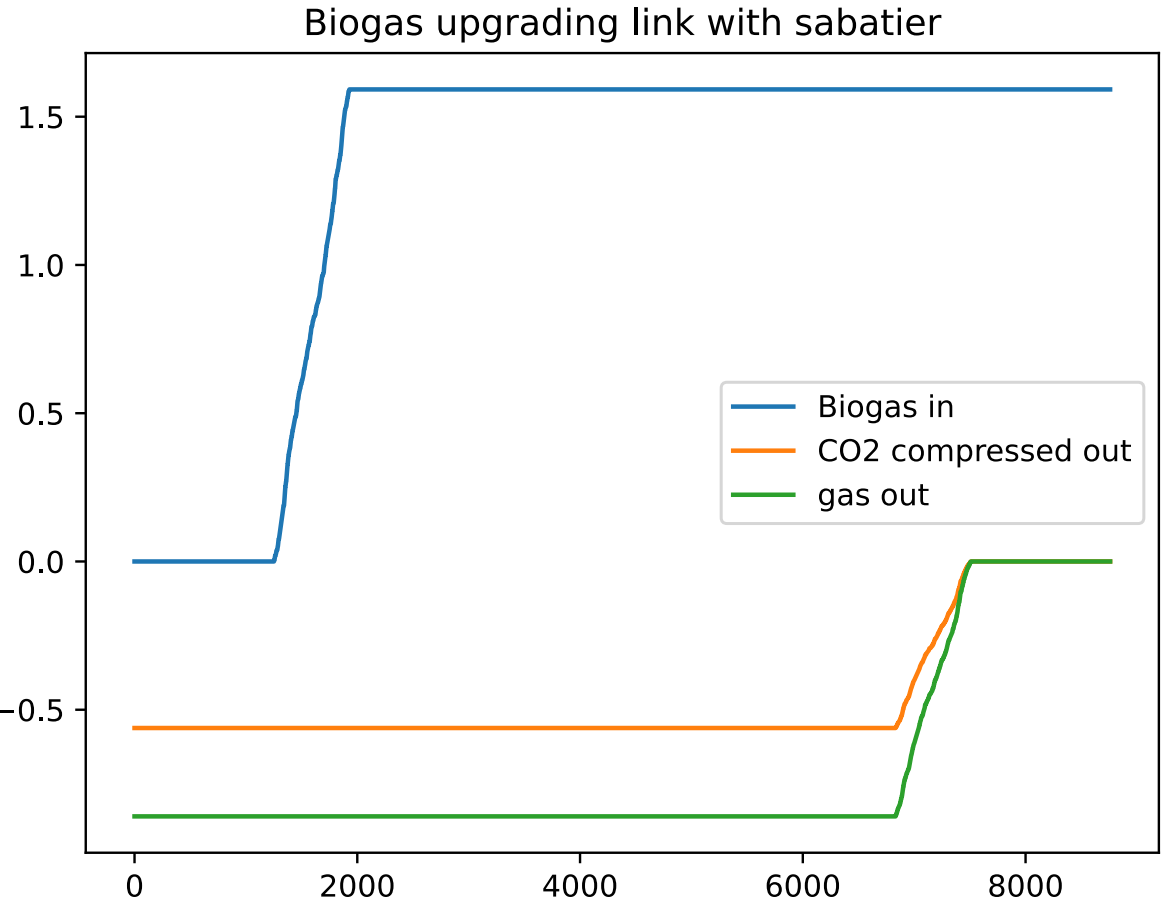
sabatier

Results

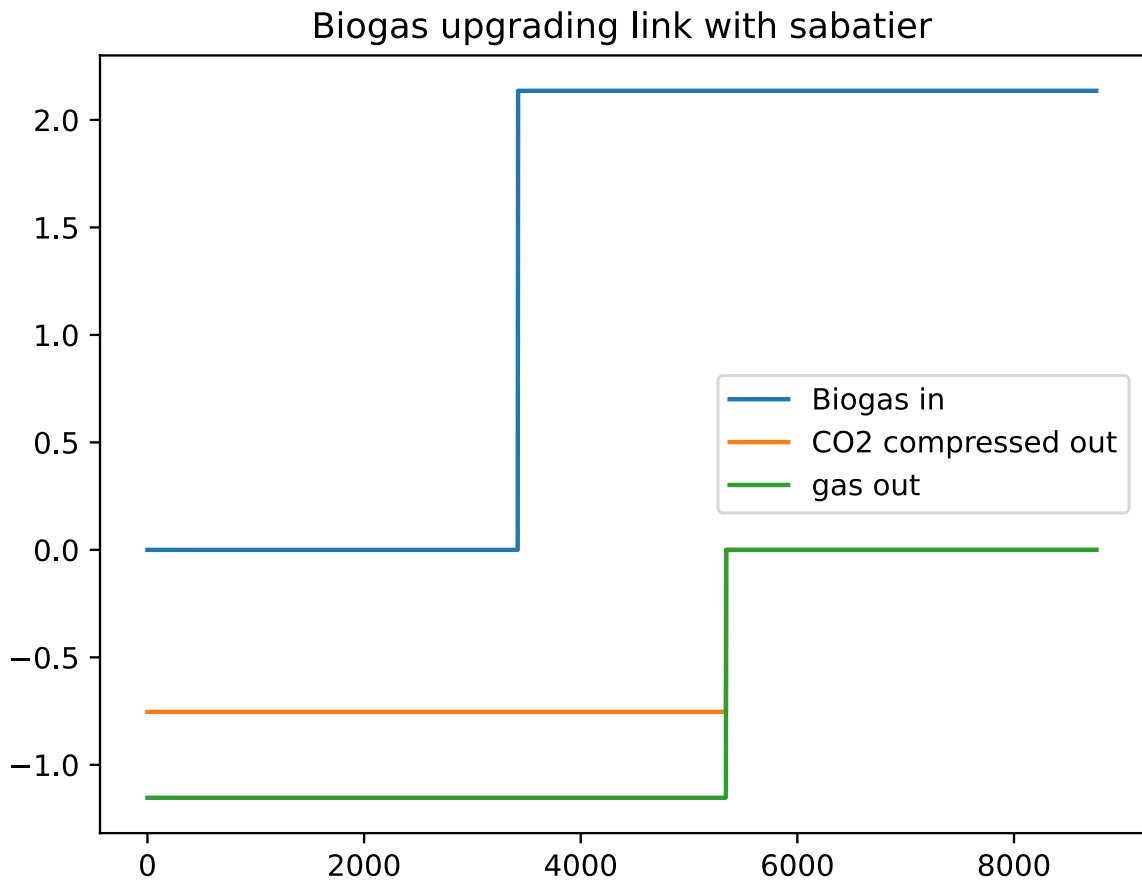
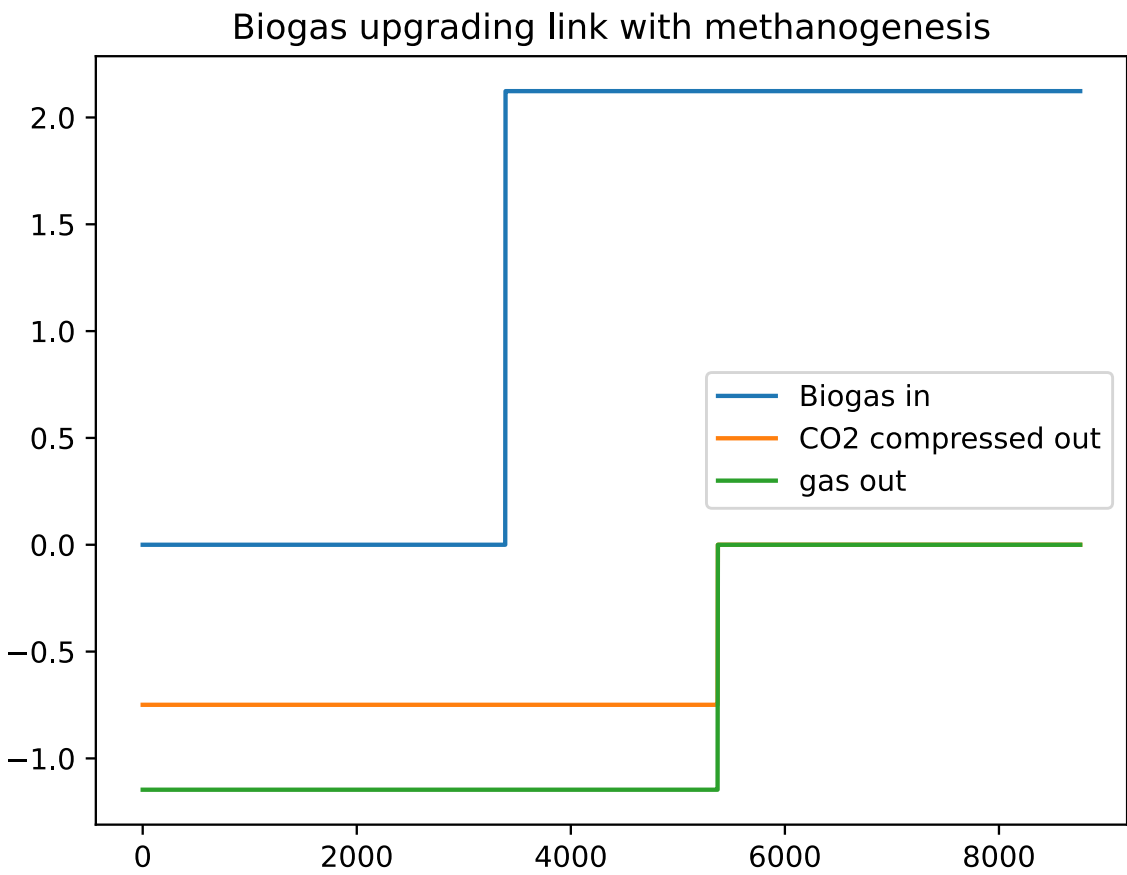
no grid



biogas dcurve



grid

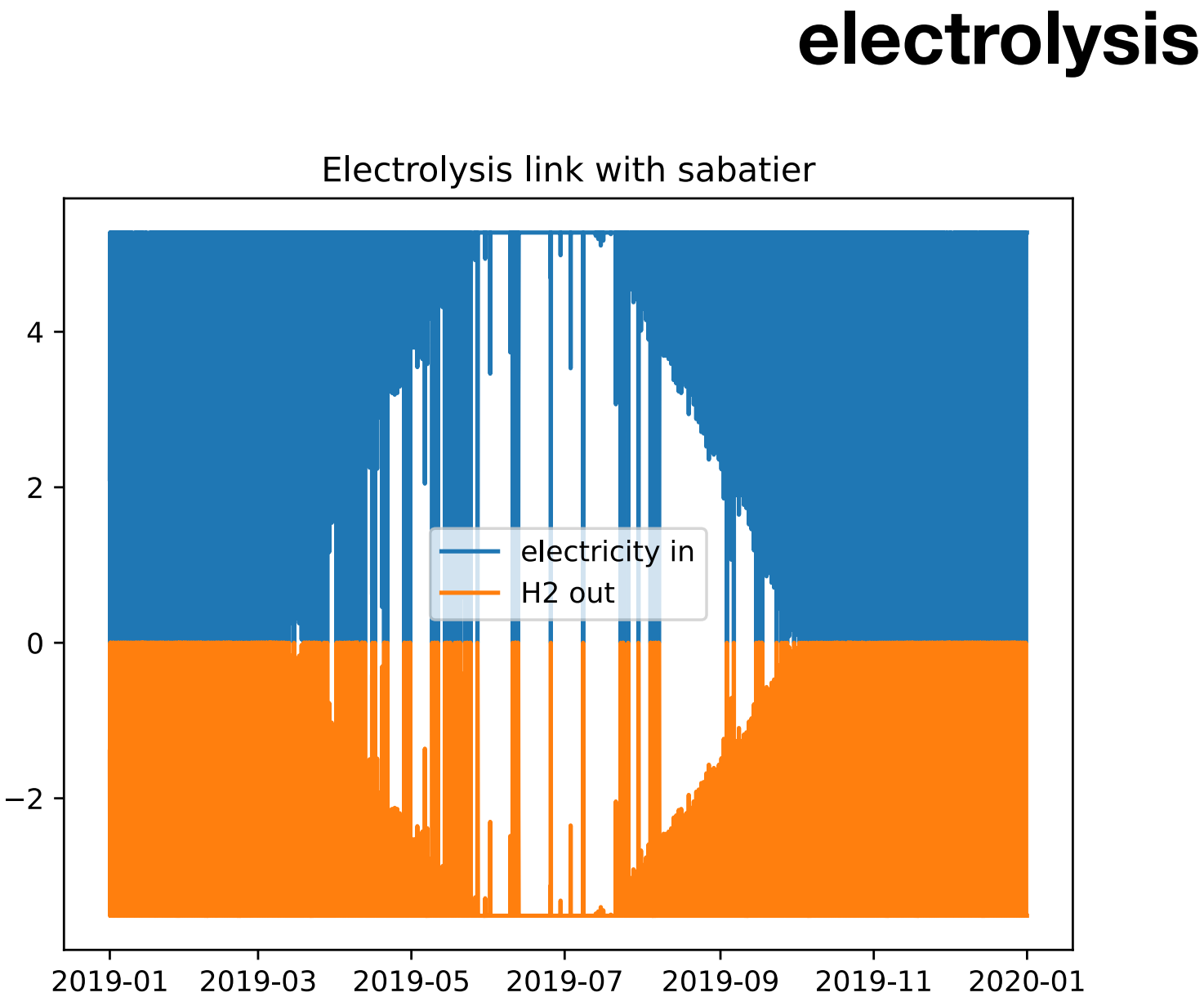
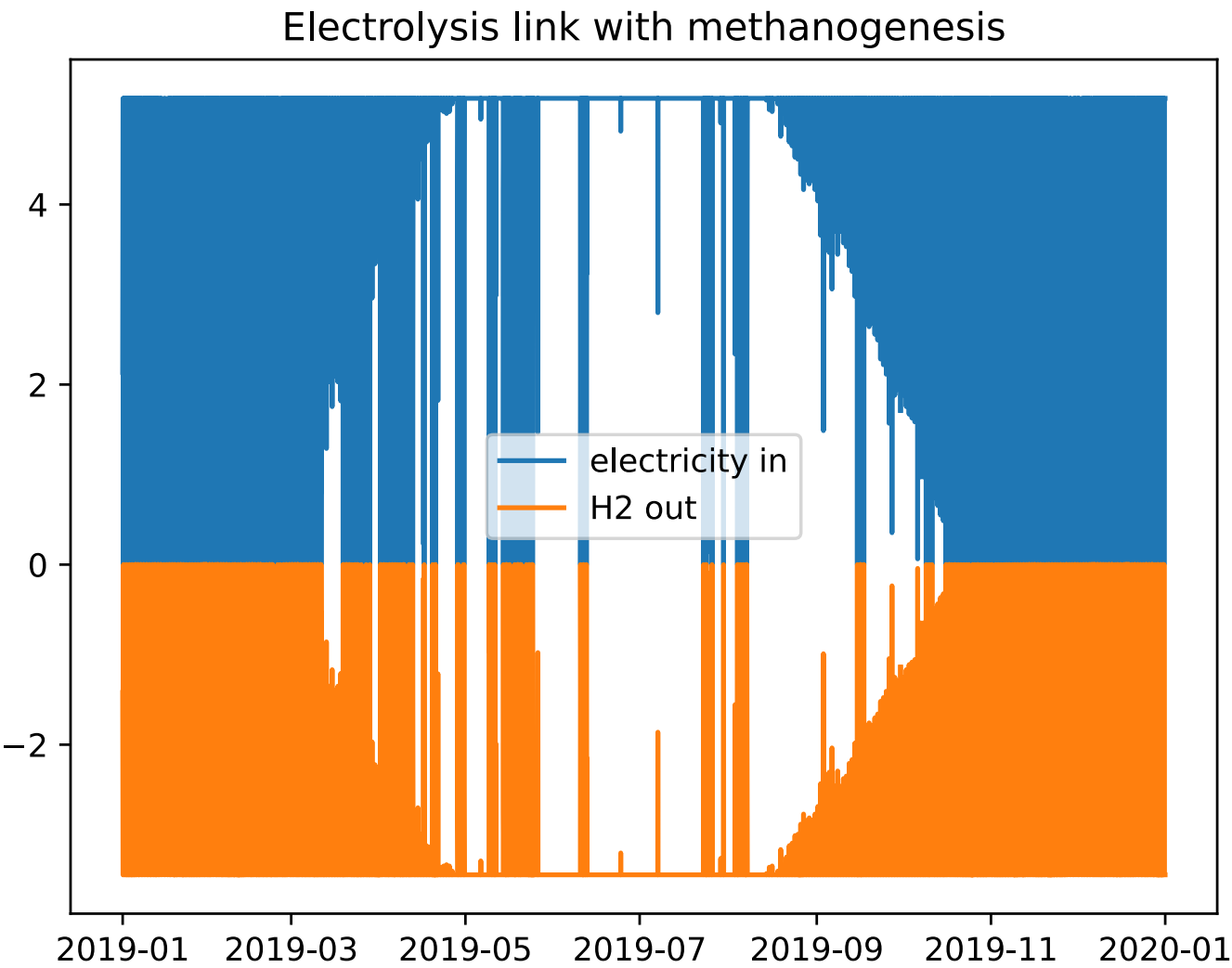


methanogen

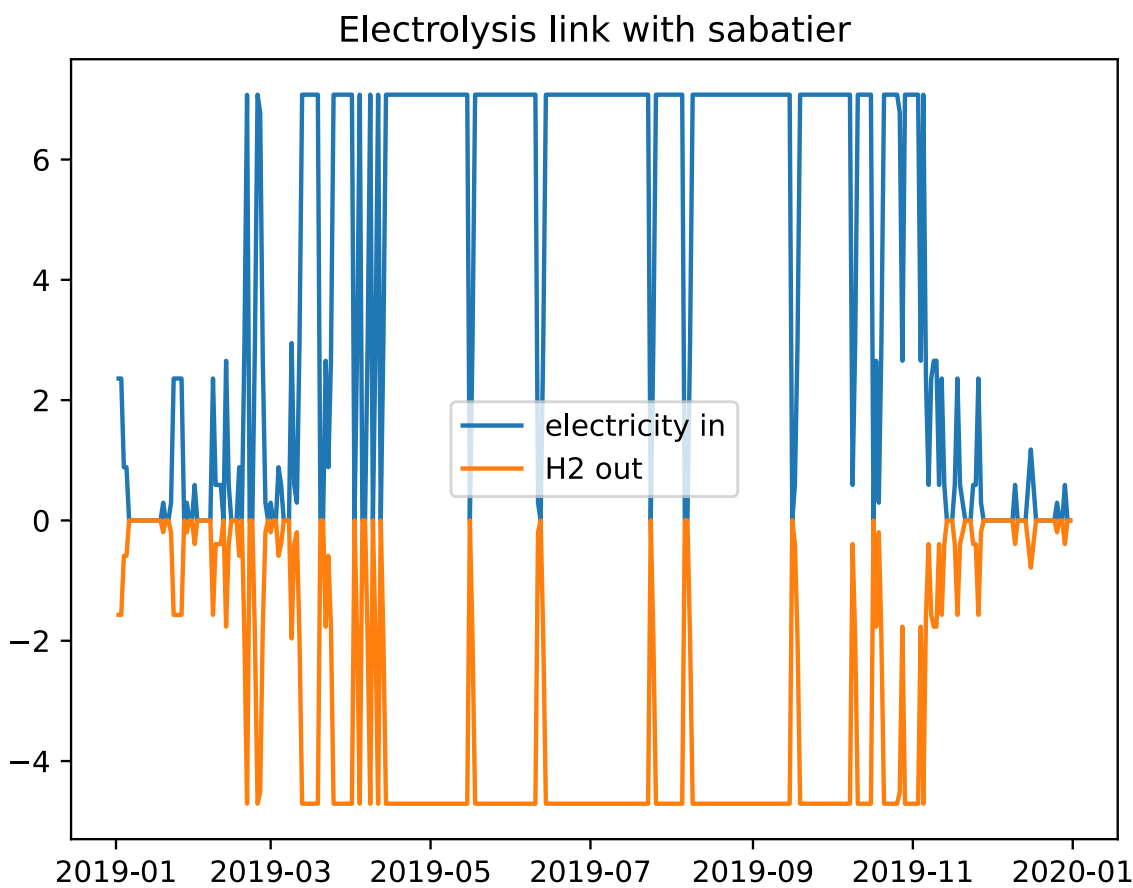
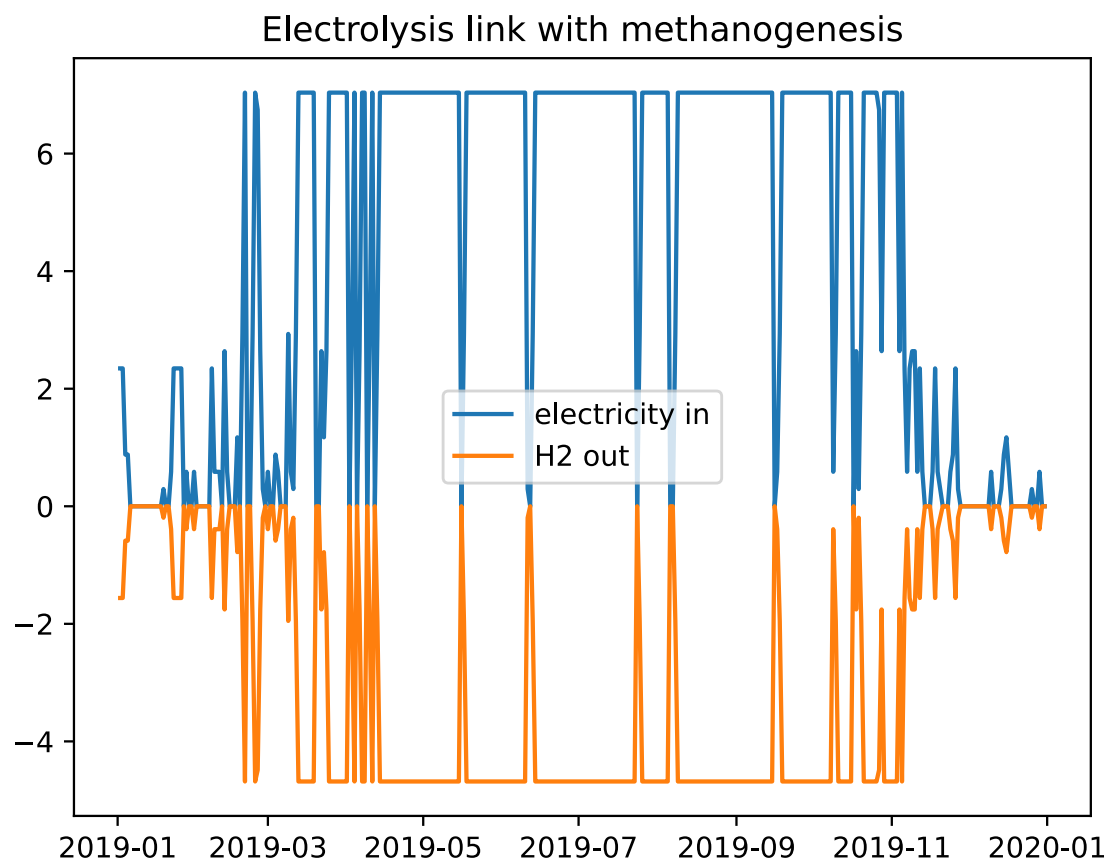
sabatier

Results

no grid



grid

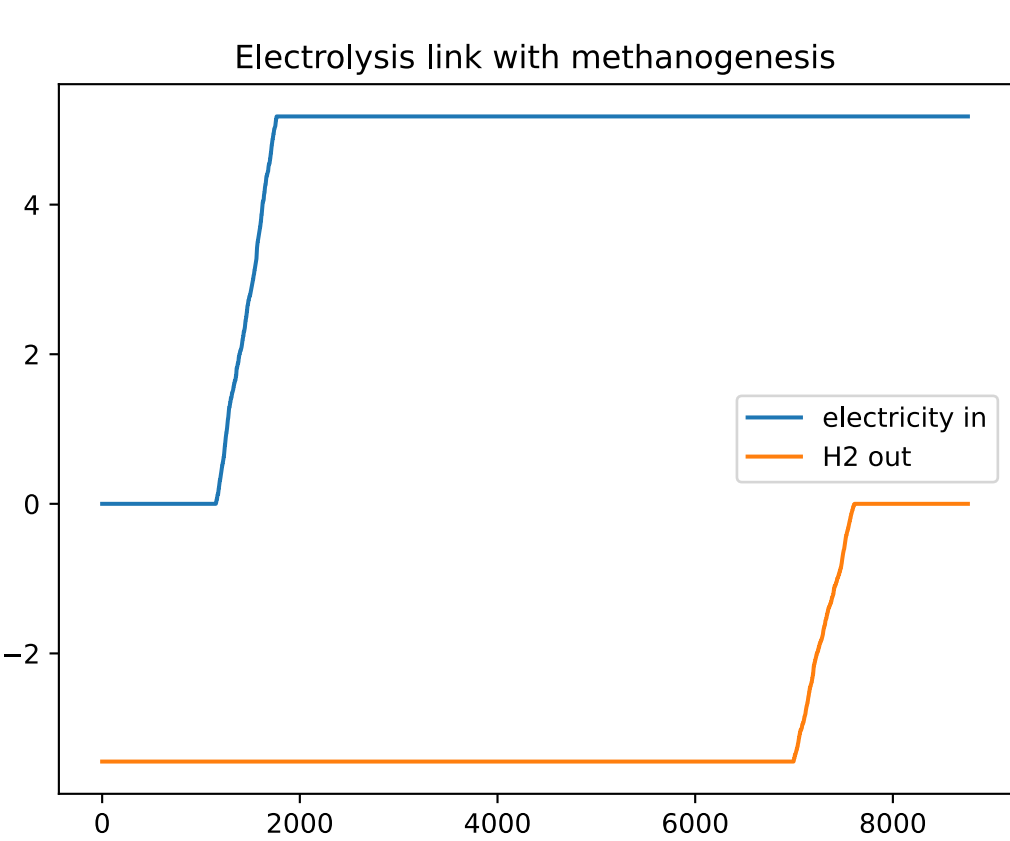


methanogen

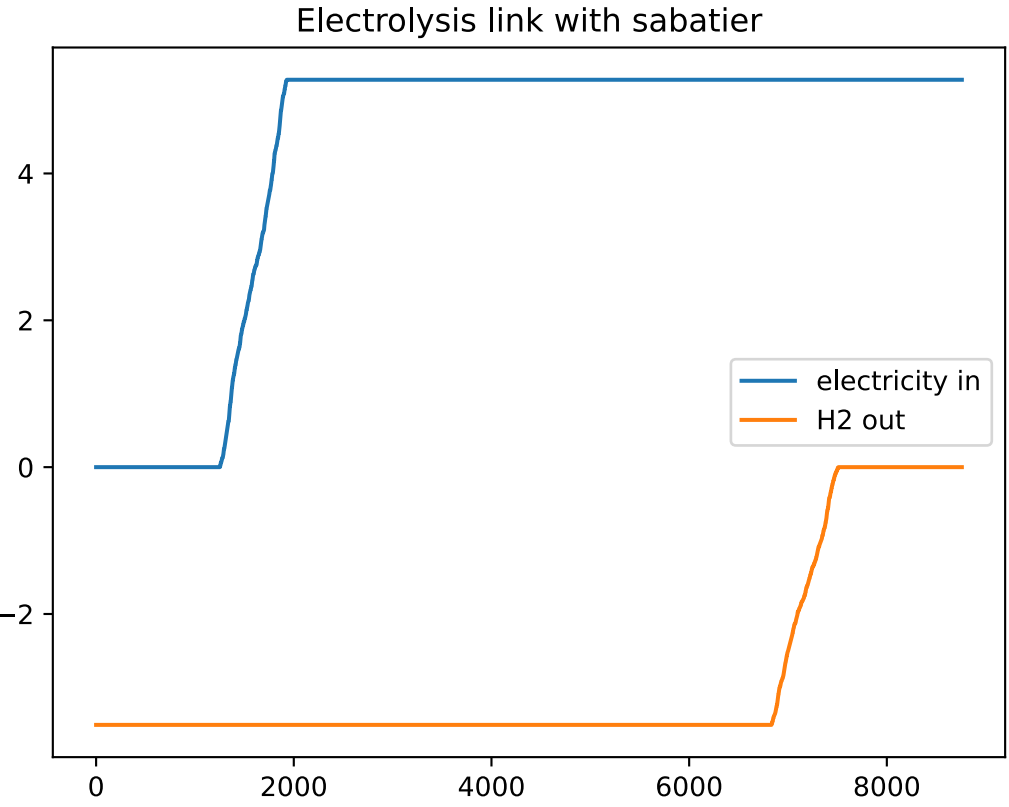
sabatier

Results

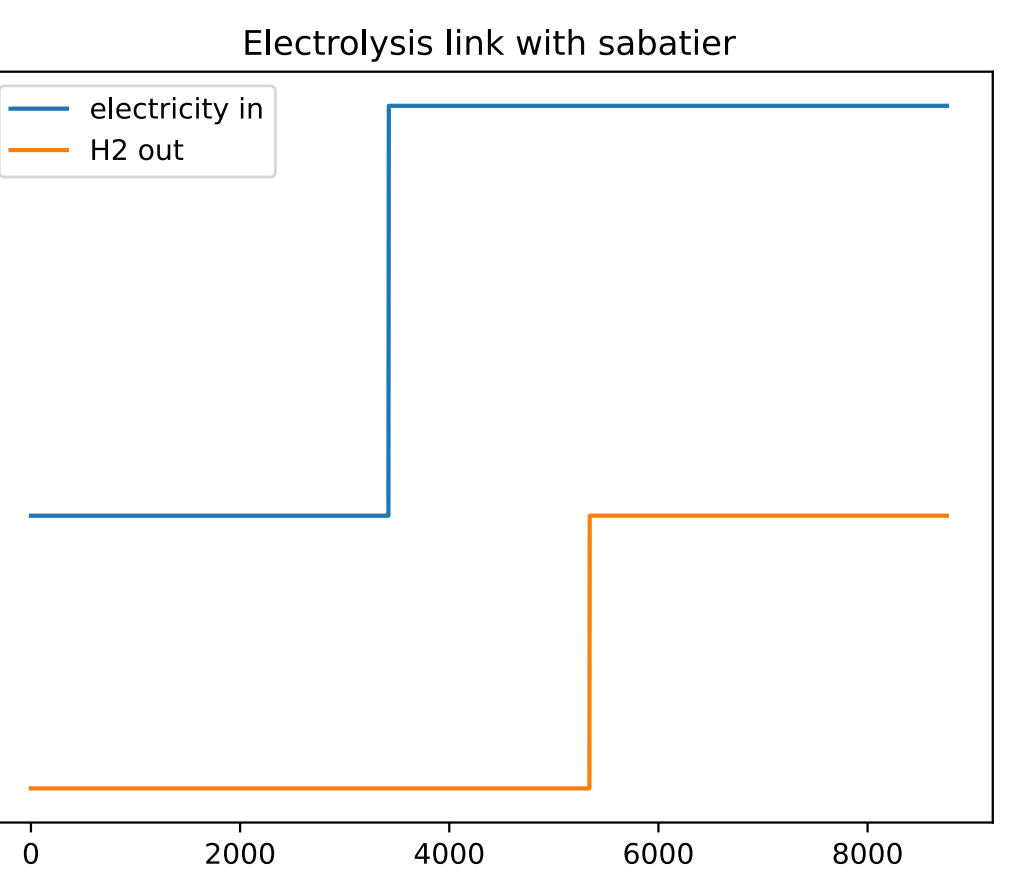
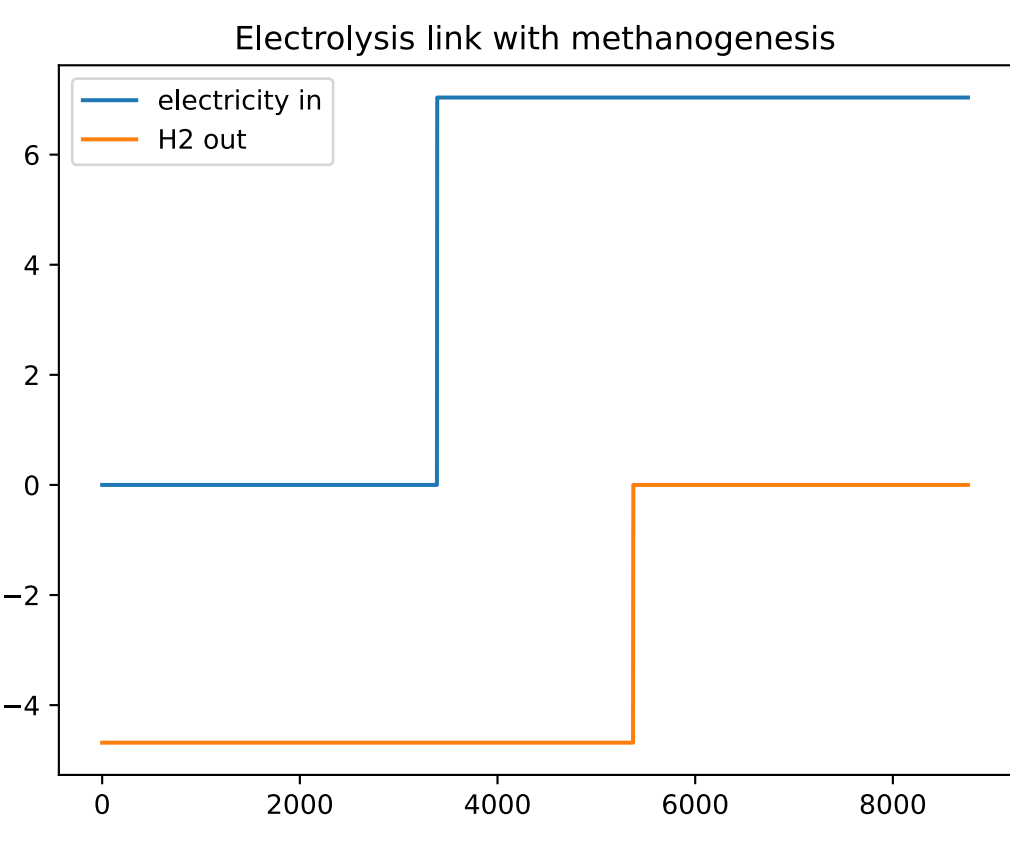
no grid



electrolysis dcurve



grid

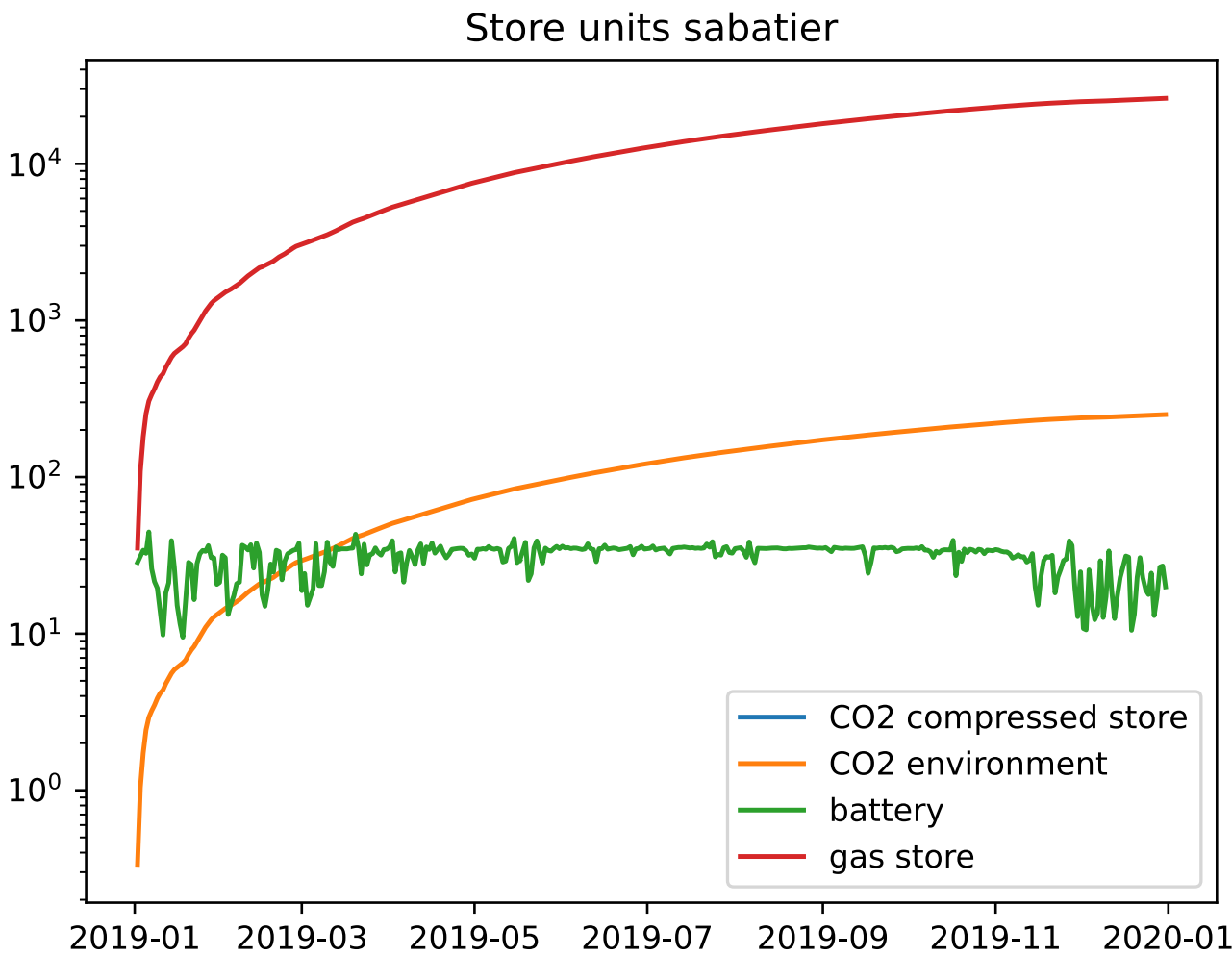
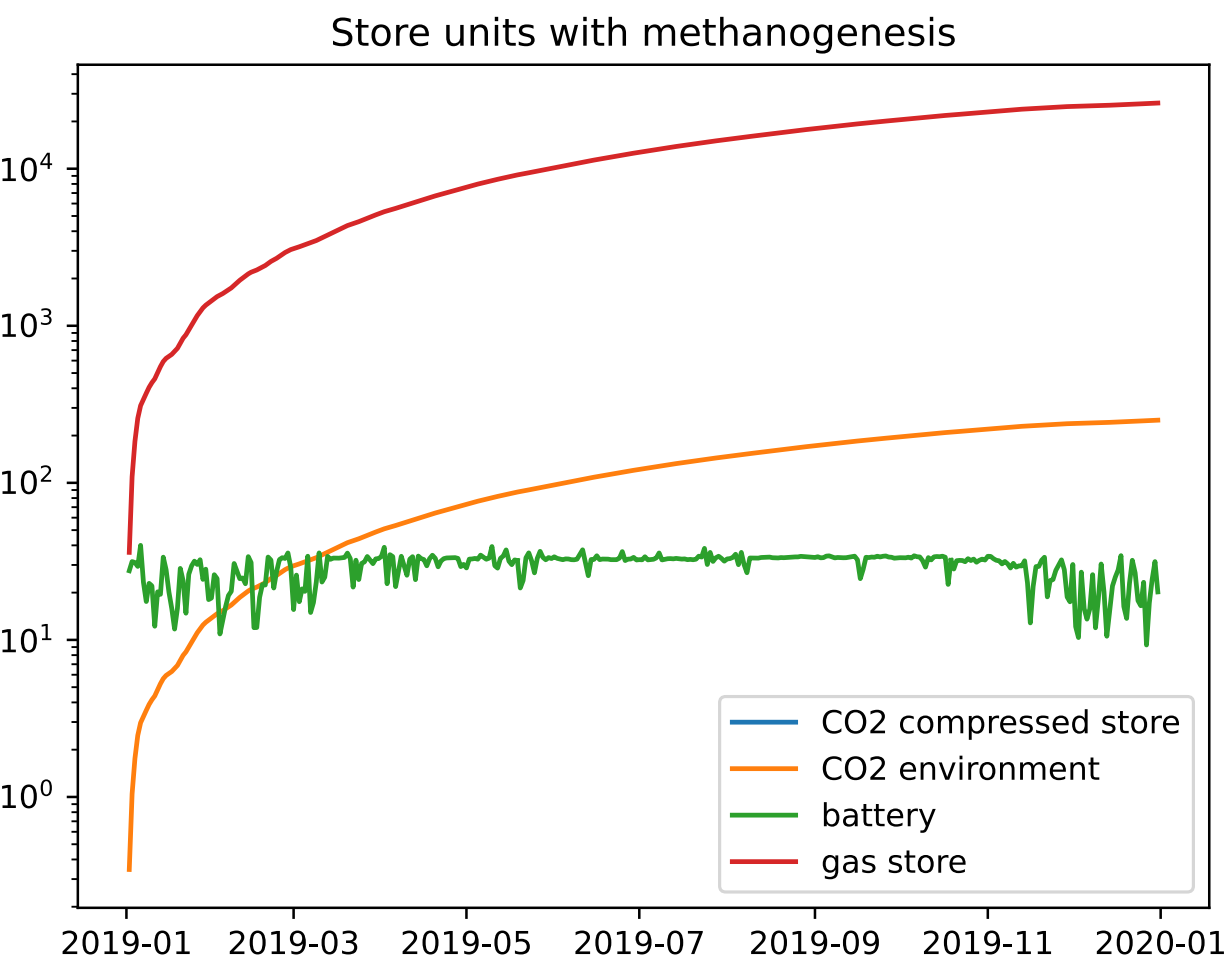


methanogen

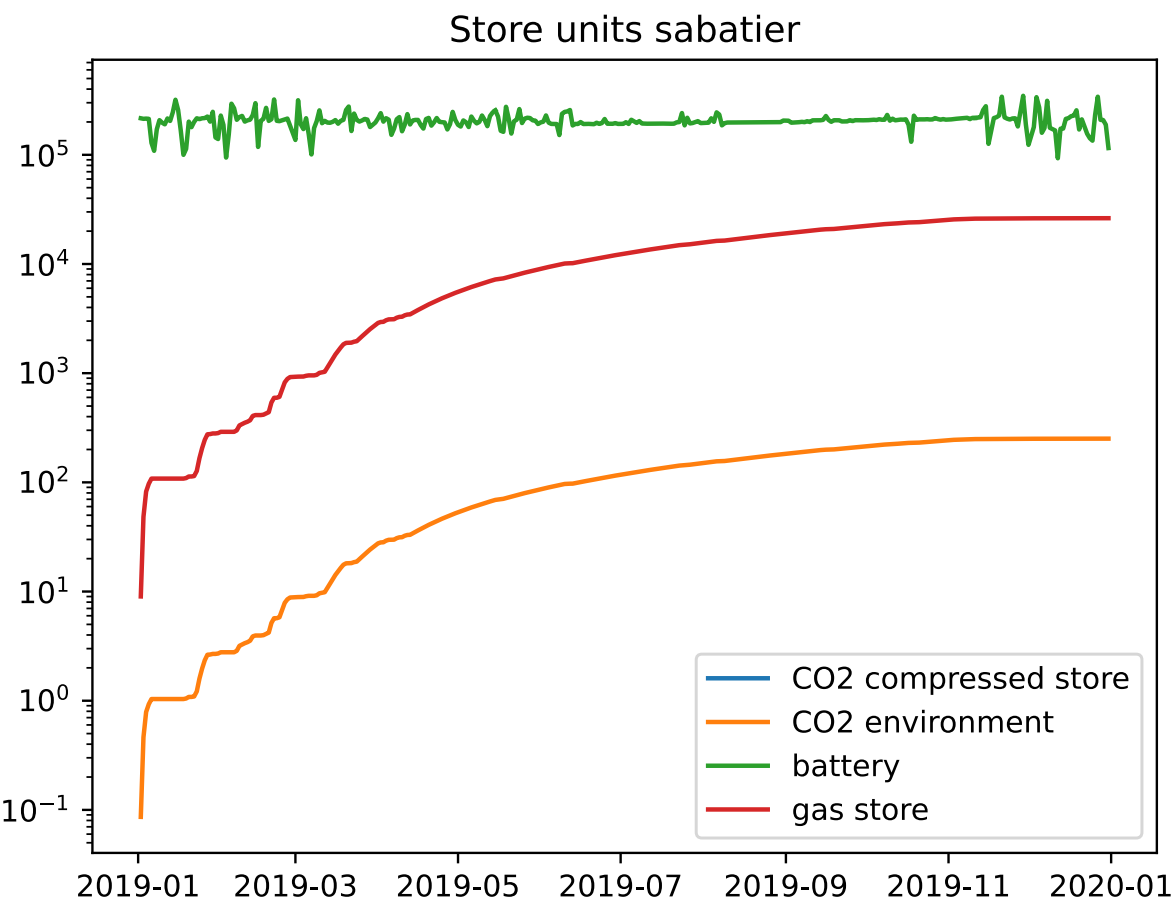
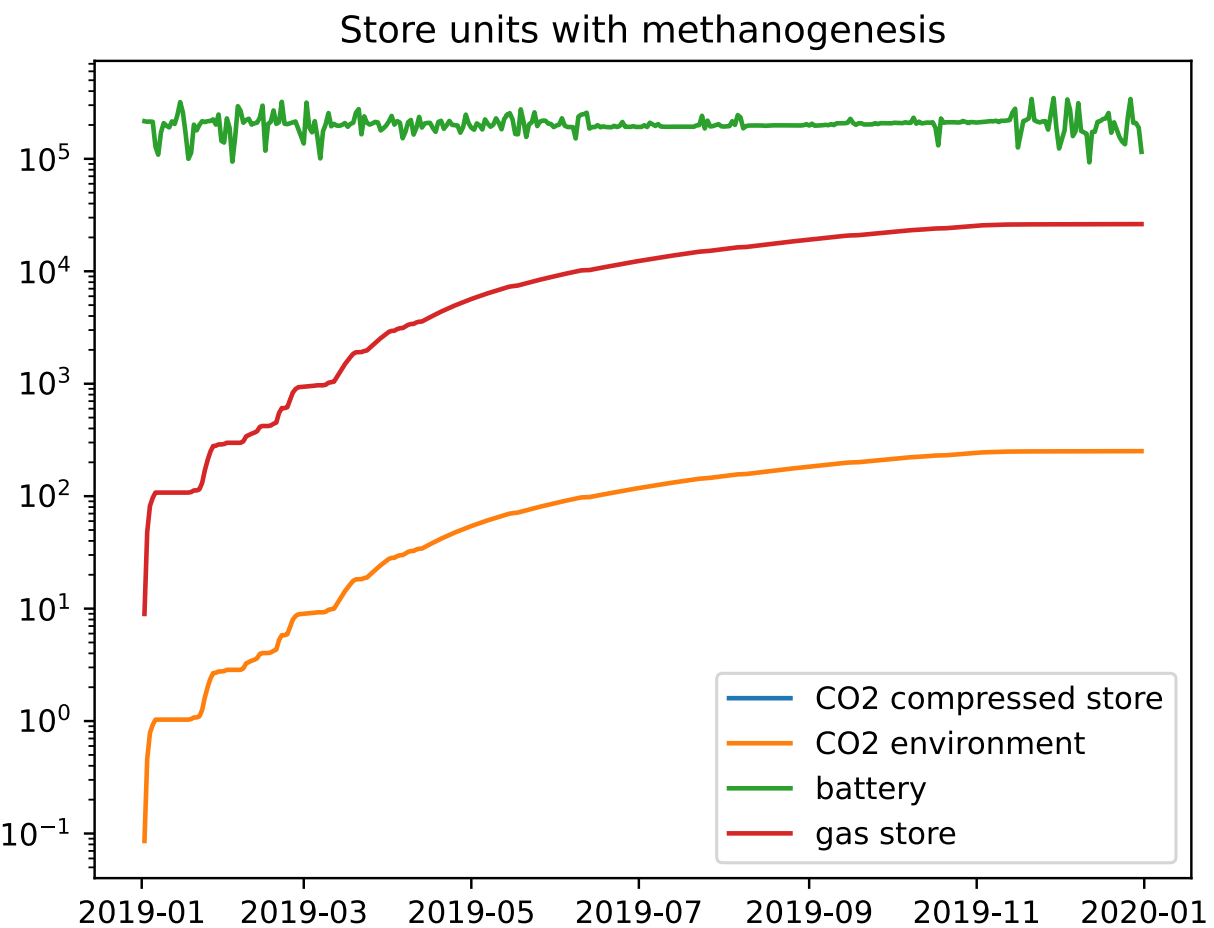
sabatier

Results

no grid



grid

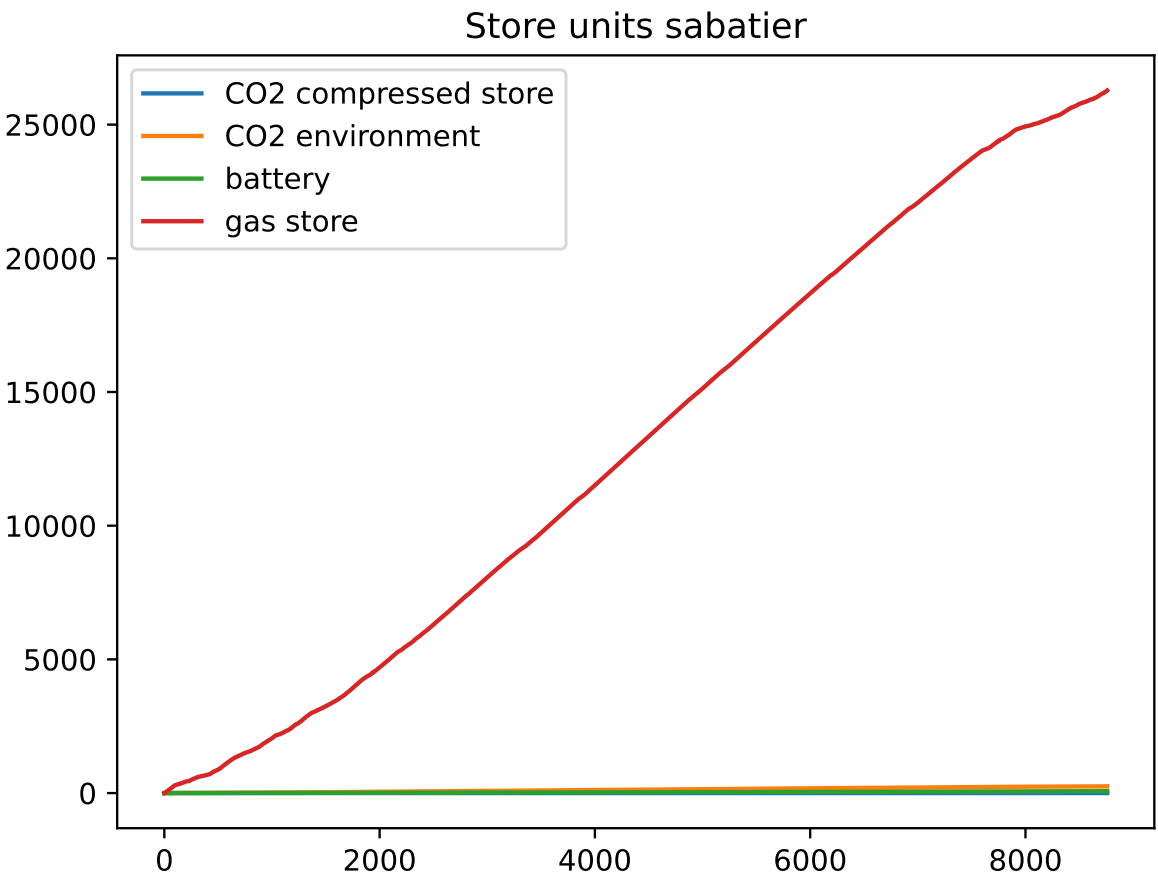
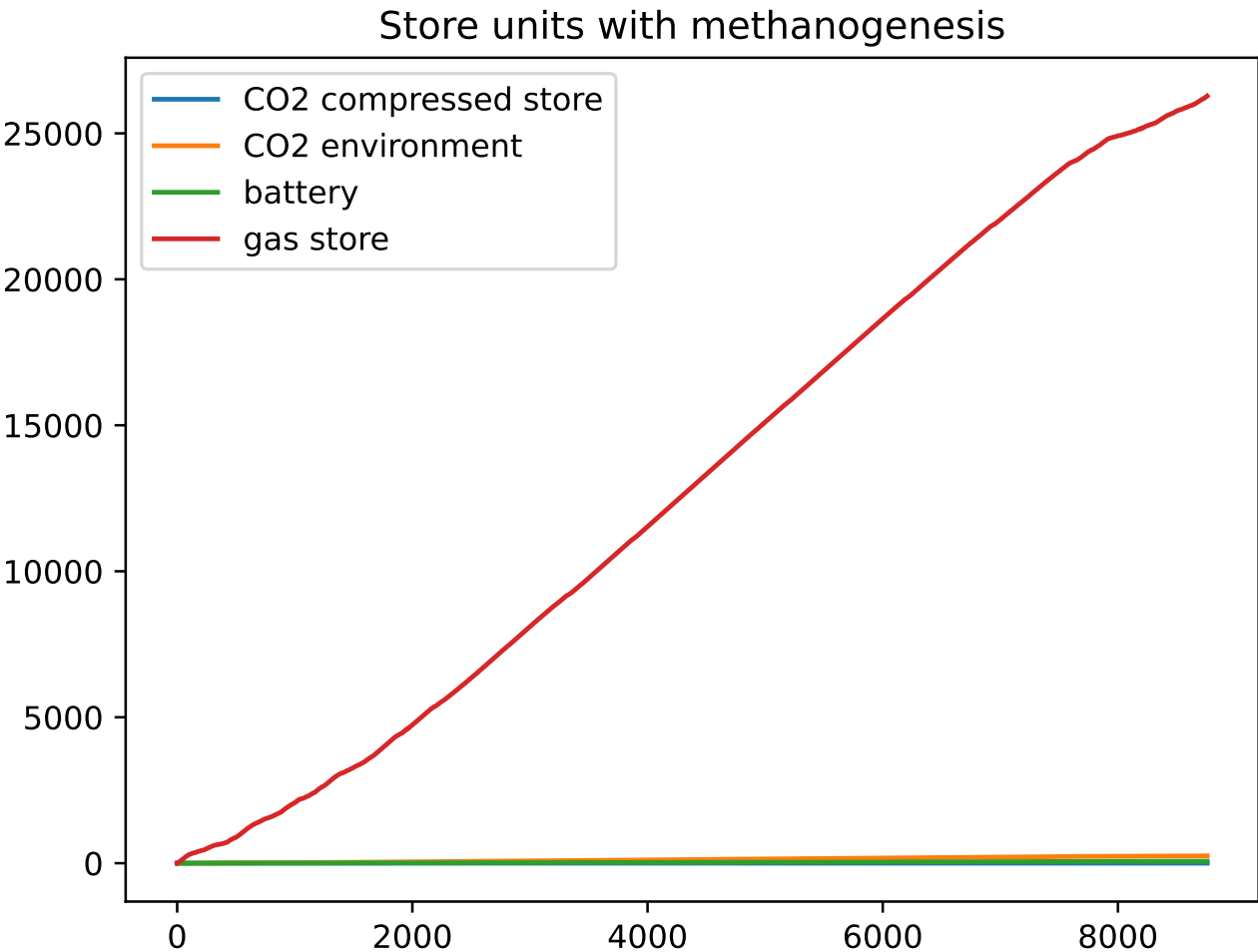


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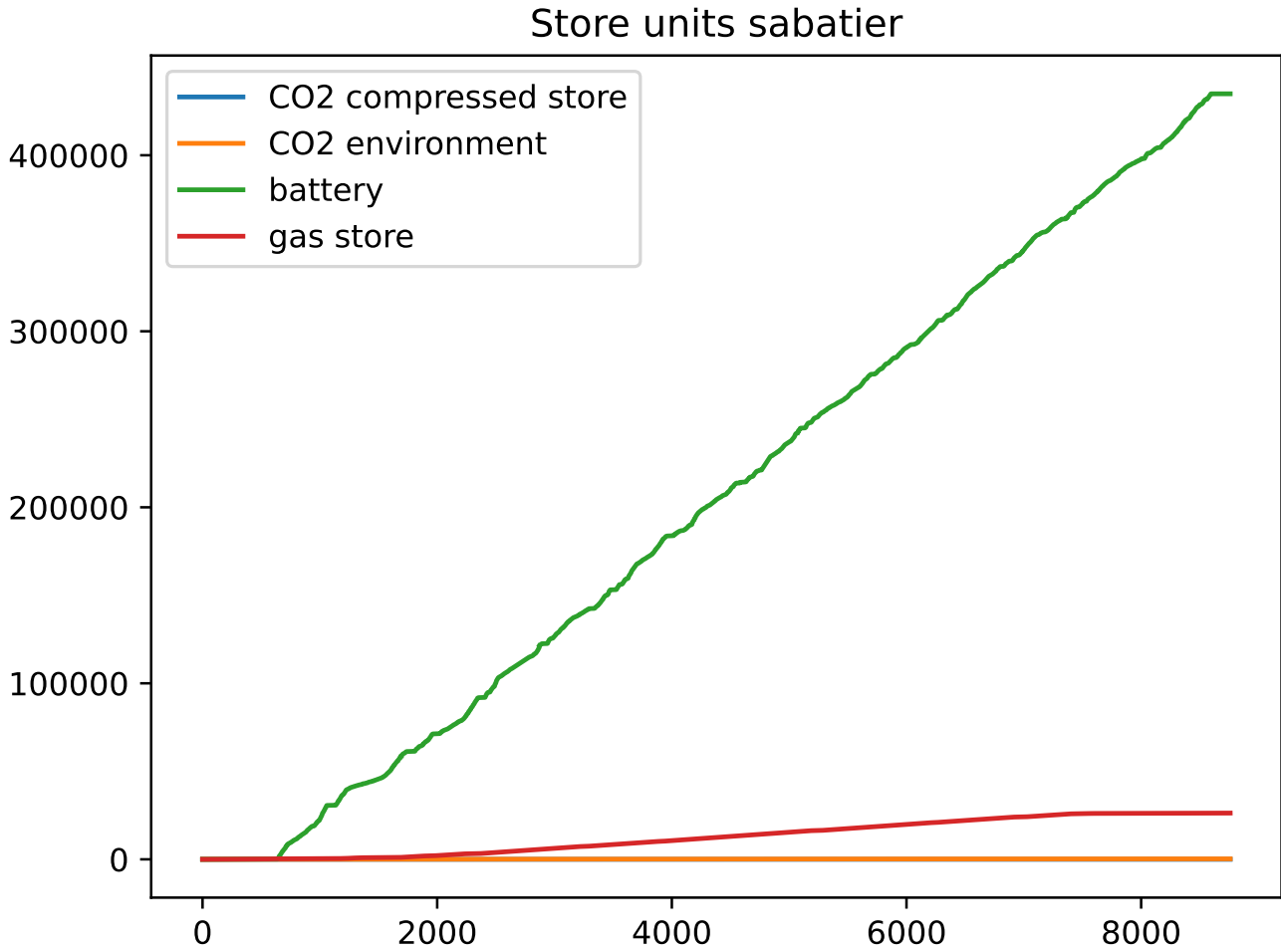
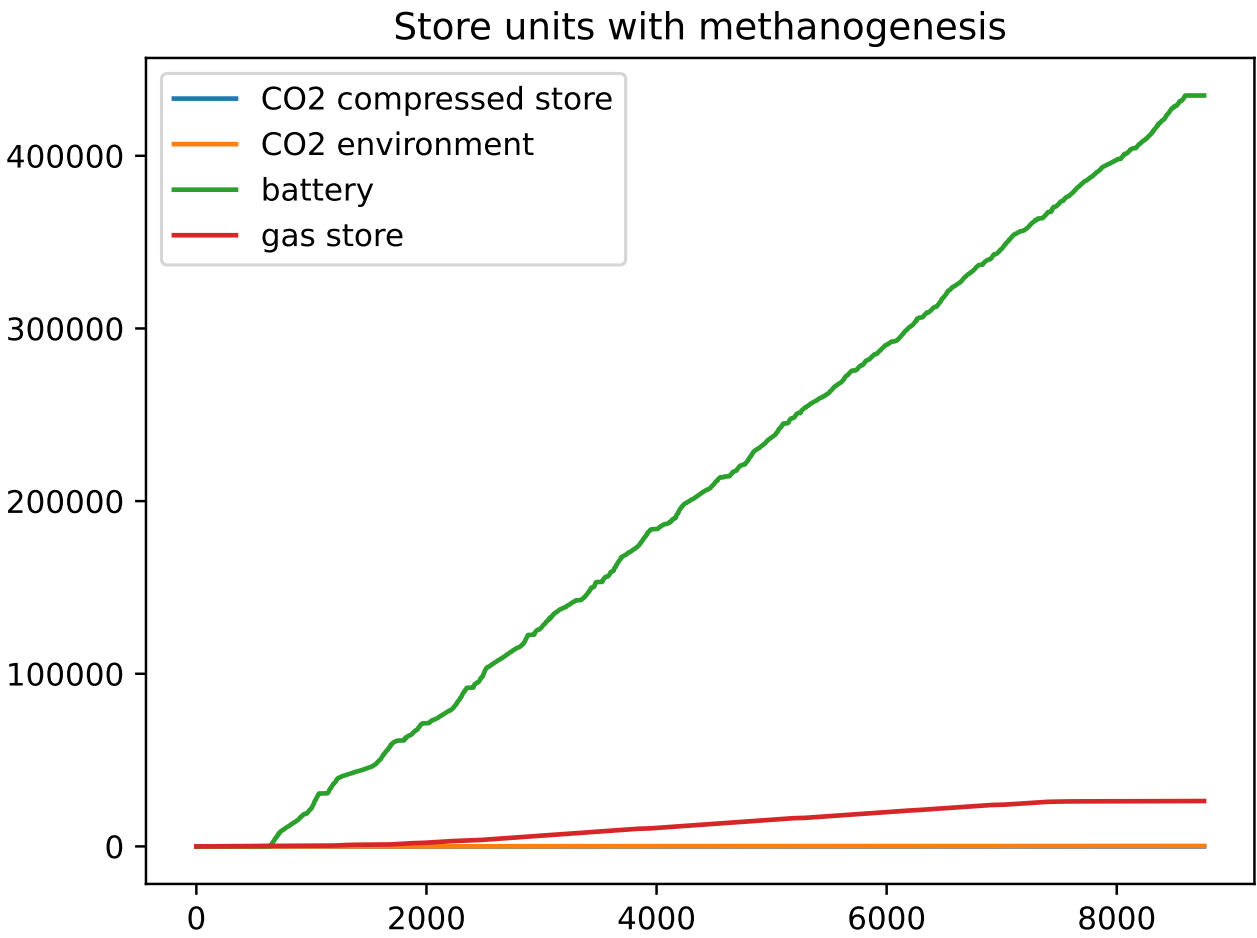
sabatier

Results

no grid



grid



methanogen

sabatier

stores

Research Question

Next steps

- YEEES?