

ADAPT/VQE Benchmark Summary

Generated (UTC): 2026-02-21T20:56:41.480197+00:00

Settings:

```
sites=[2, 3] t=1.0 u=4.0 dv=0.5 boundary=open ordering=blocked odd_policy=min_sz  
ADAPT(inner_optimizer=lbfsgs, inner_steps=1, max_depth=1, max_time_s=1.0, allow_repeats=False)  
VQE(reps=2, restarts=1, maxiter=100, seed=7)
```

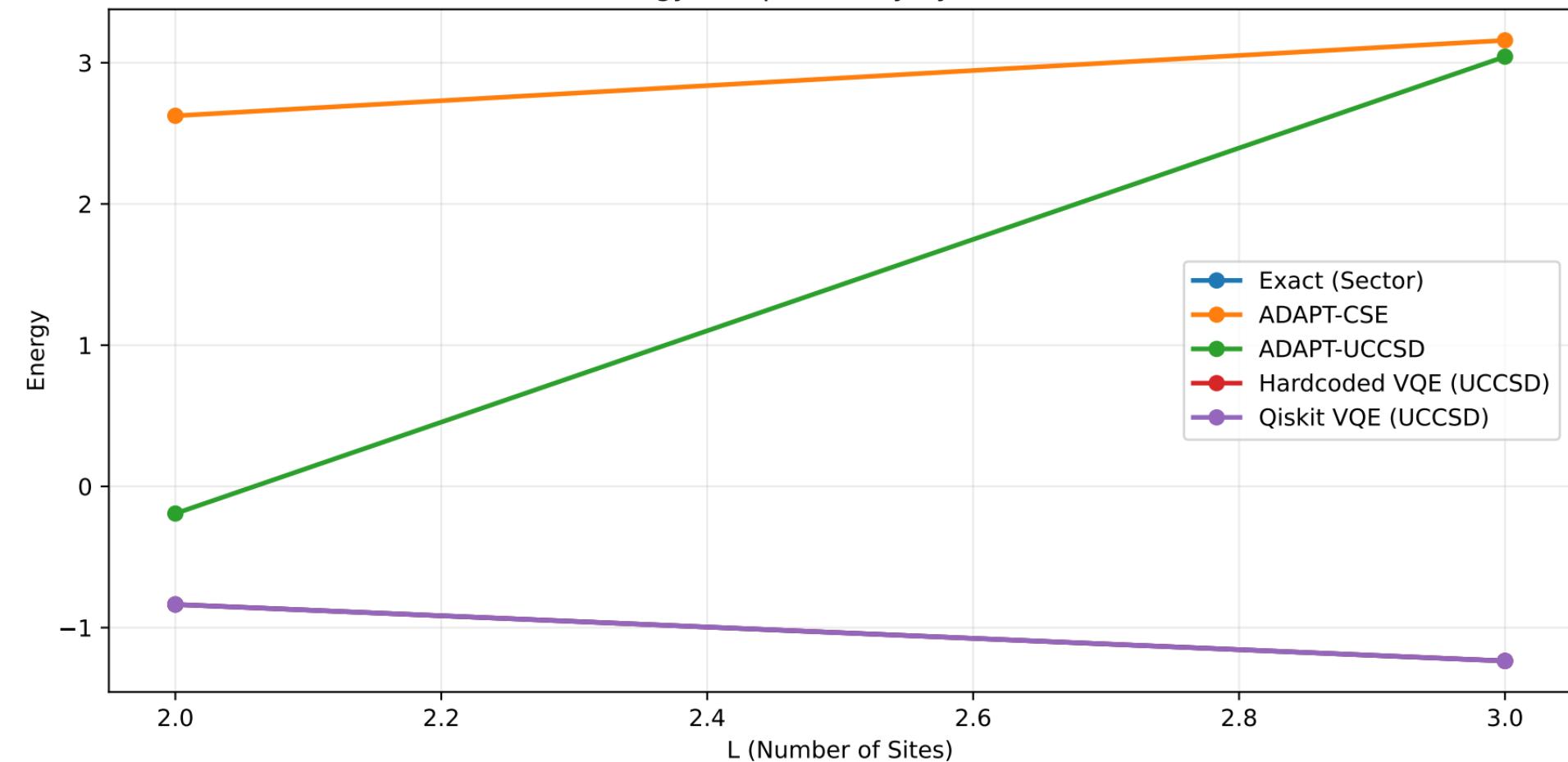
L=2 (n\_up=1, n\_down=1)

Exact (Sector)	E=-0.836057118155  dE =0.000e+00 t=0.00s
ADAPT-CSE	E= 2.624209203055  dE =3.460e+00 t=0.51s
ADAPT-UCCSD	E=-0.192228194594  dE =6.438e-01 t=0.24s
Hardcoded VQE (UCCSD)	E=-0.836056968909  dE =1.492e-07 t=0.06s
Qiskit VQE (UCCSD)	E=-0.836057117595  dE =5.600e-10 t=2.04s

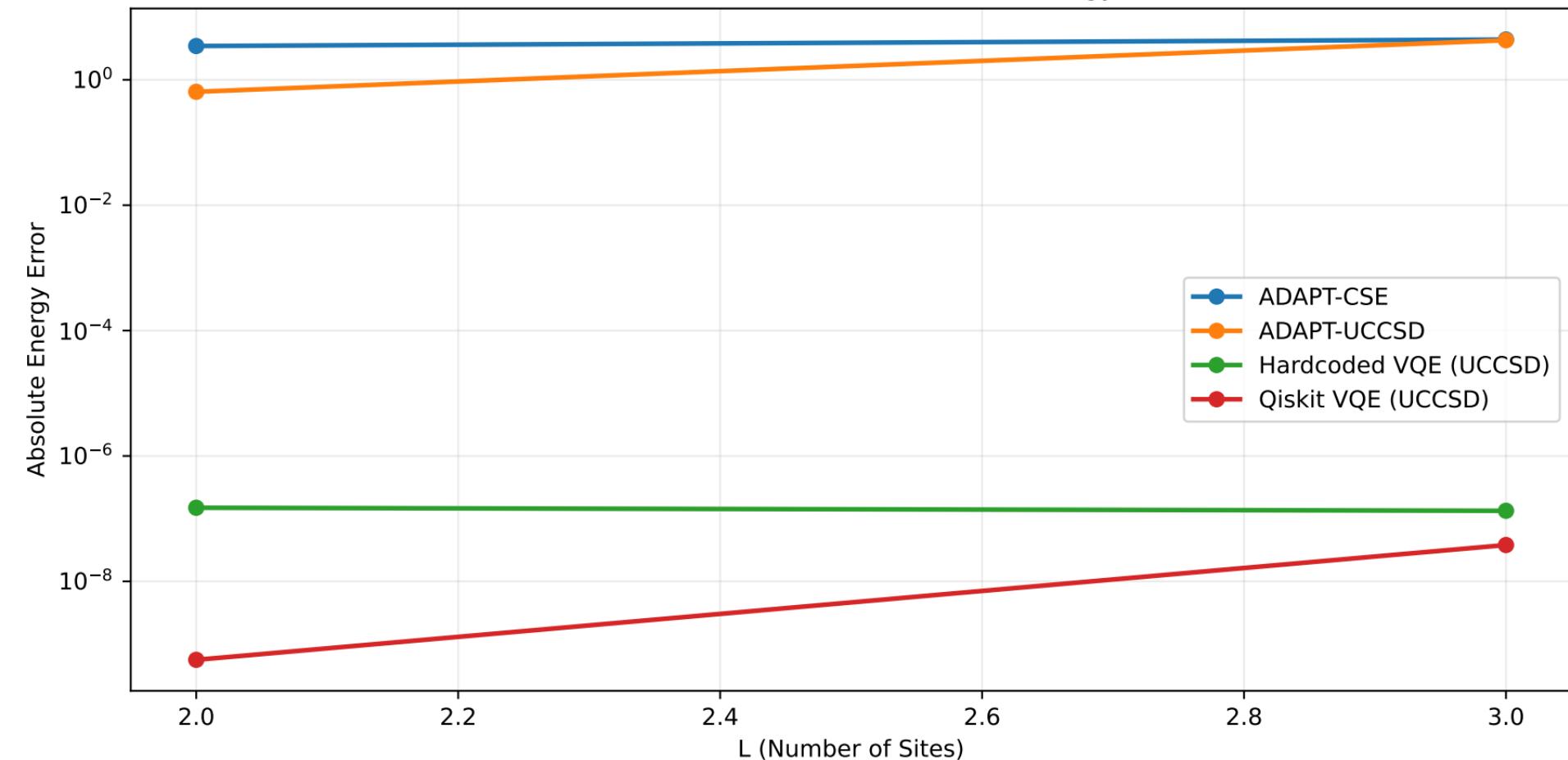
L=3 (n\_up=2, n\_down=1)

Exact (Sector)	E=-1.236067977500  dE =0.000e+00 t=0.00s
ADAPT-CSE	E= 3.158529015596  dE =4.395e+00 t=0.83s
ADAPT-UCCSD	E= 3.043066873062  dE =4.279e+00 t=1.06s
Hardcoded VQE (UCCSD)	E=-1.236067844029  dE =1.335e-07 t=2.40s
Qiskit VQE (UCCSD)	E=-1.236067939546  dE =3.795e-08 t=44.27s

## Energy Comparison by System Size



## Absolute Error vs Exact Sector Energy



### Runtime by Method

