

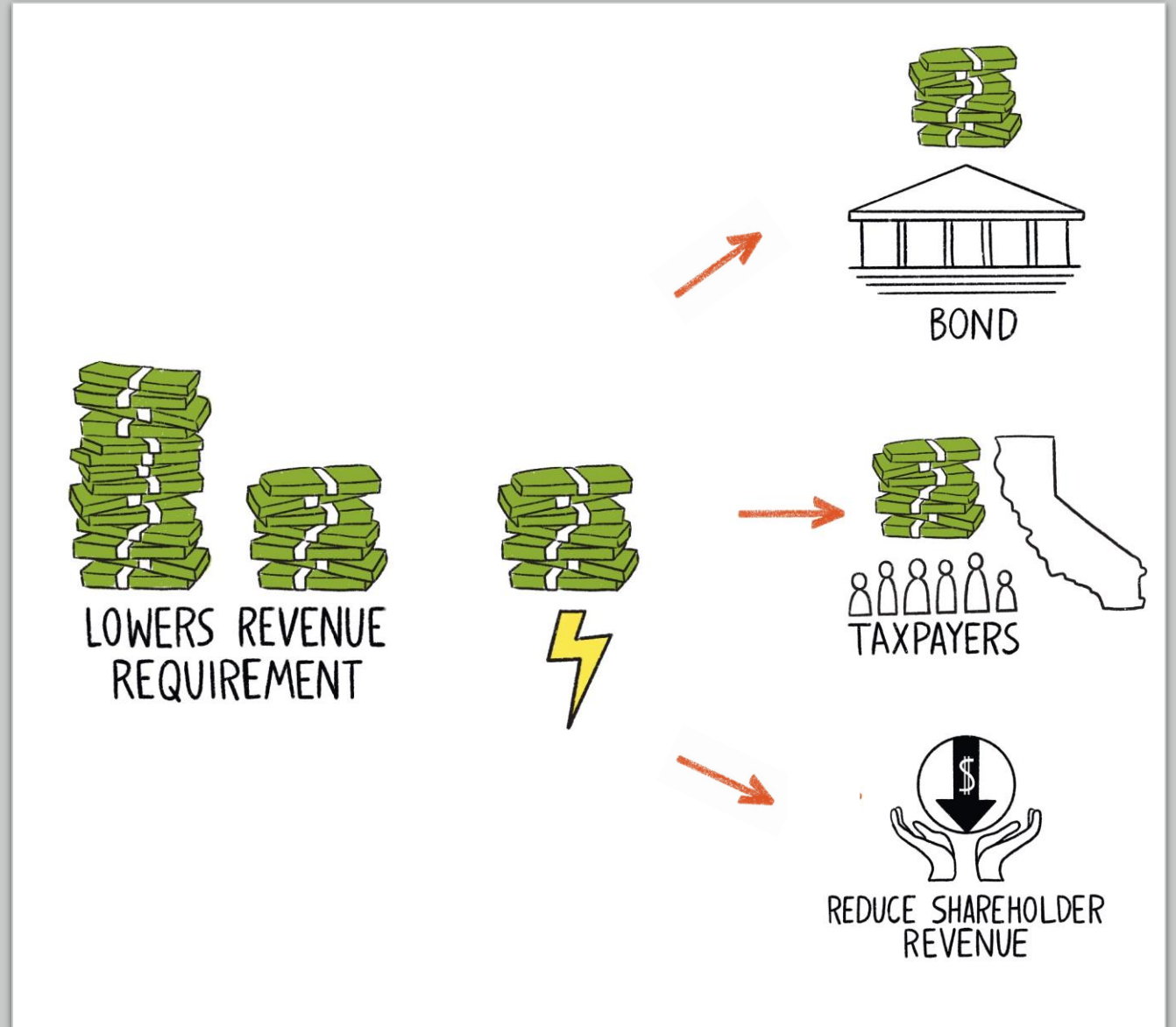
Ratemaking levers to reduce rates, improve affordability, and align with climate goals

Merrian Borgeson

Senior Scientist, Natural Resources Defense Council

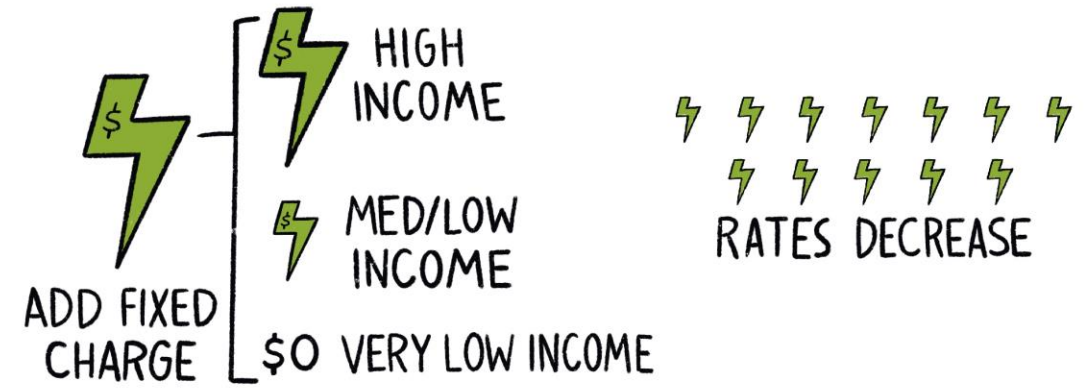
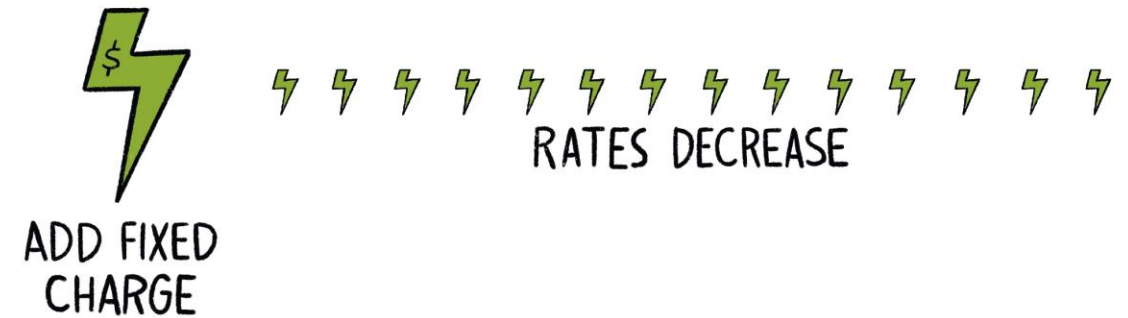
March 1, 2022

Reduce revenue requirement

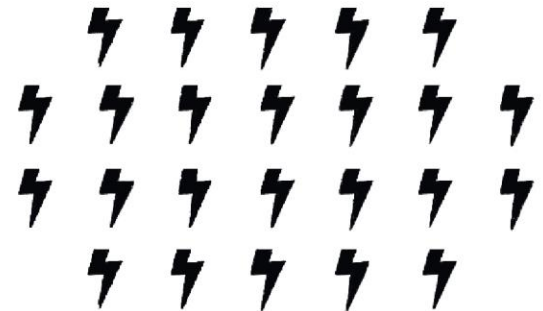


Change rate design and who pays

NOW: 



Increase
infrastructure
utilization

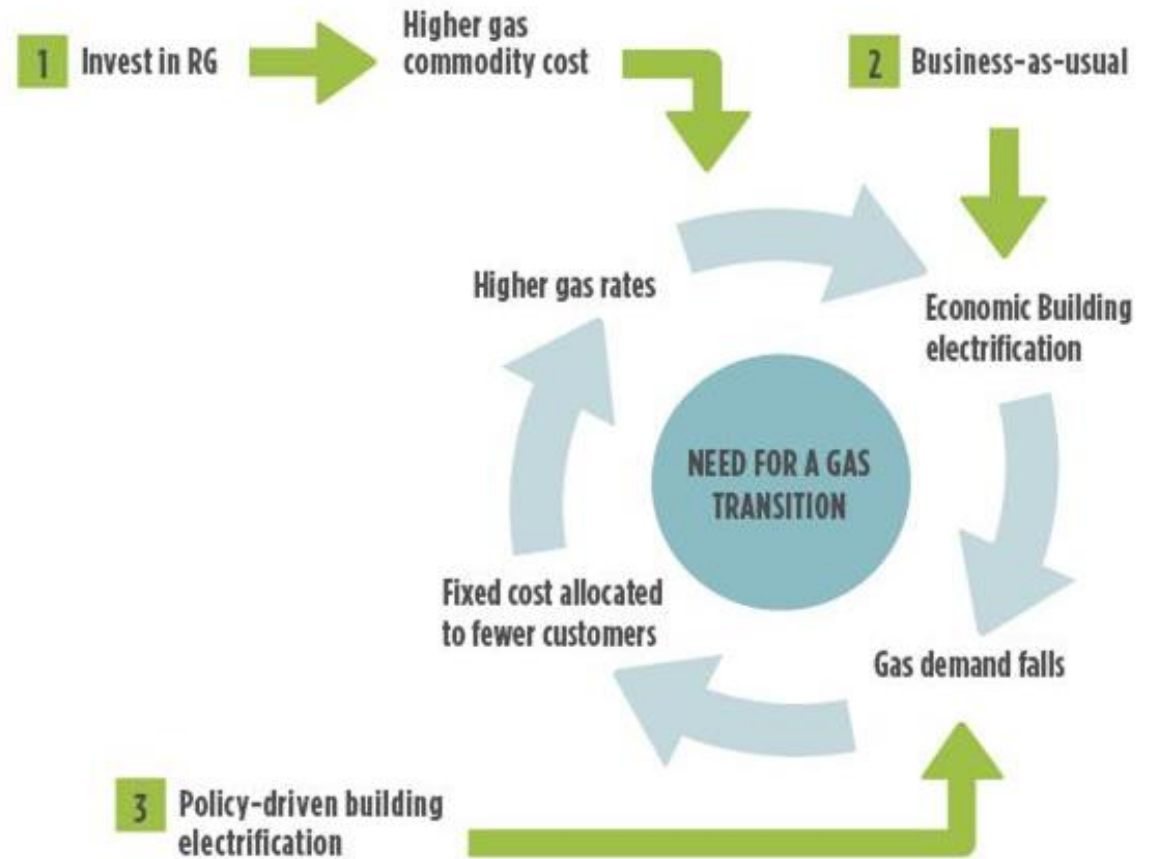


SYSTEM UTILIZED BETTER

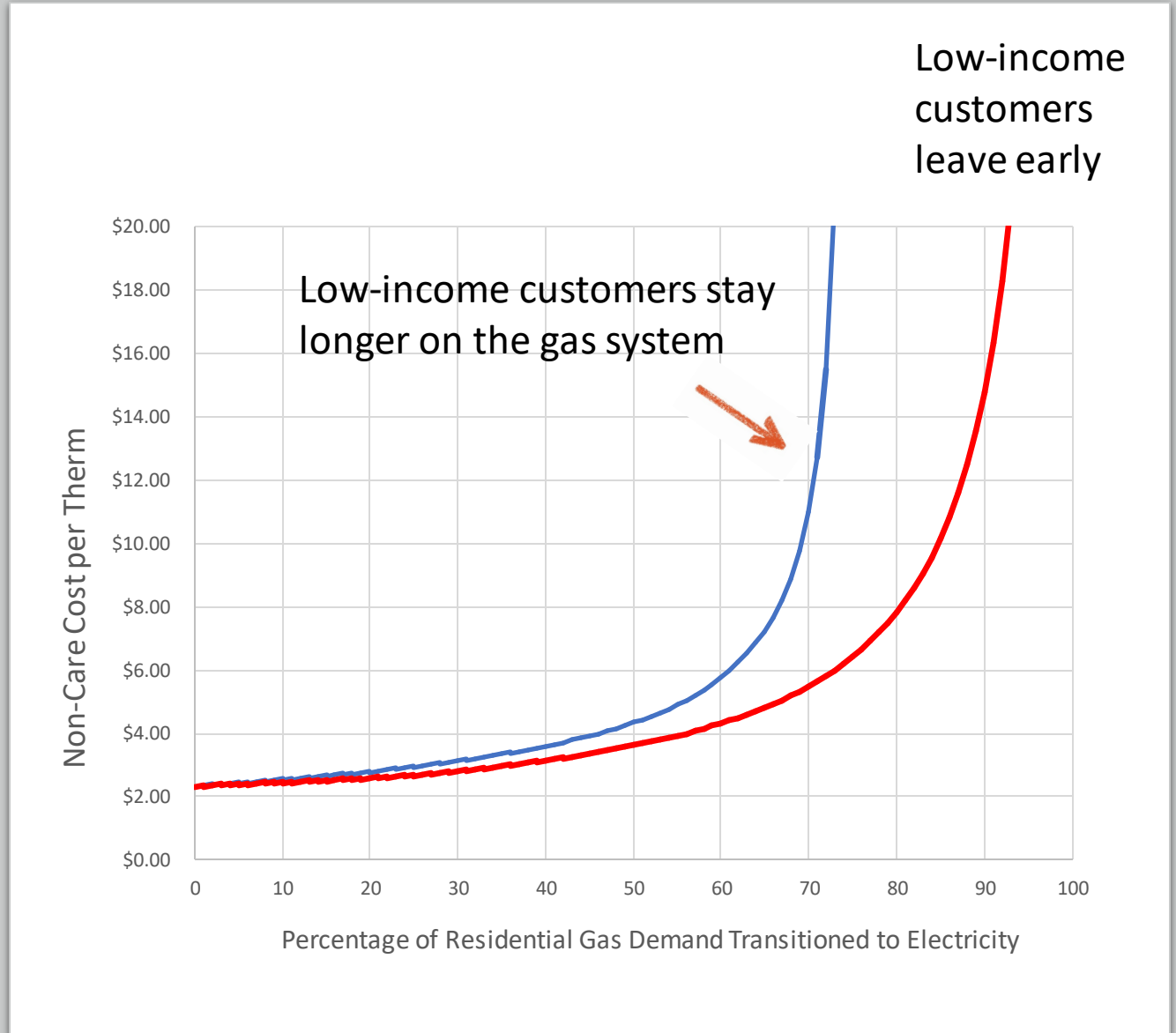
COST PER KW/H ↓

Unmanaged gas system at risk of reduced utilization

Source: E3



Gas price instability will be exacerbated if low-income customers remain on the system longer



Operating cost “break even” electric rates (vs gas or gasoline)

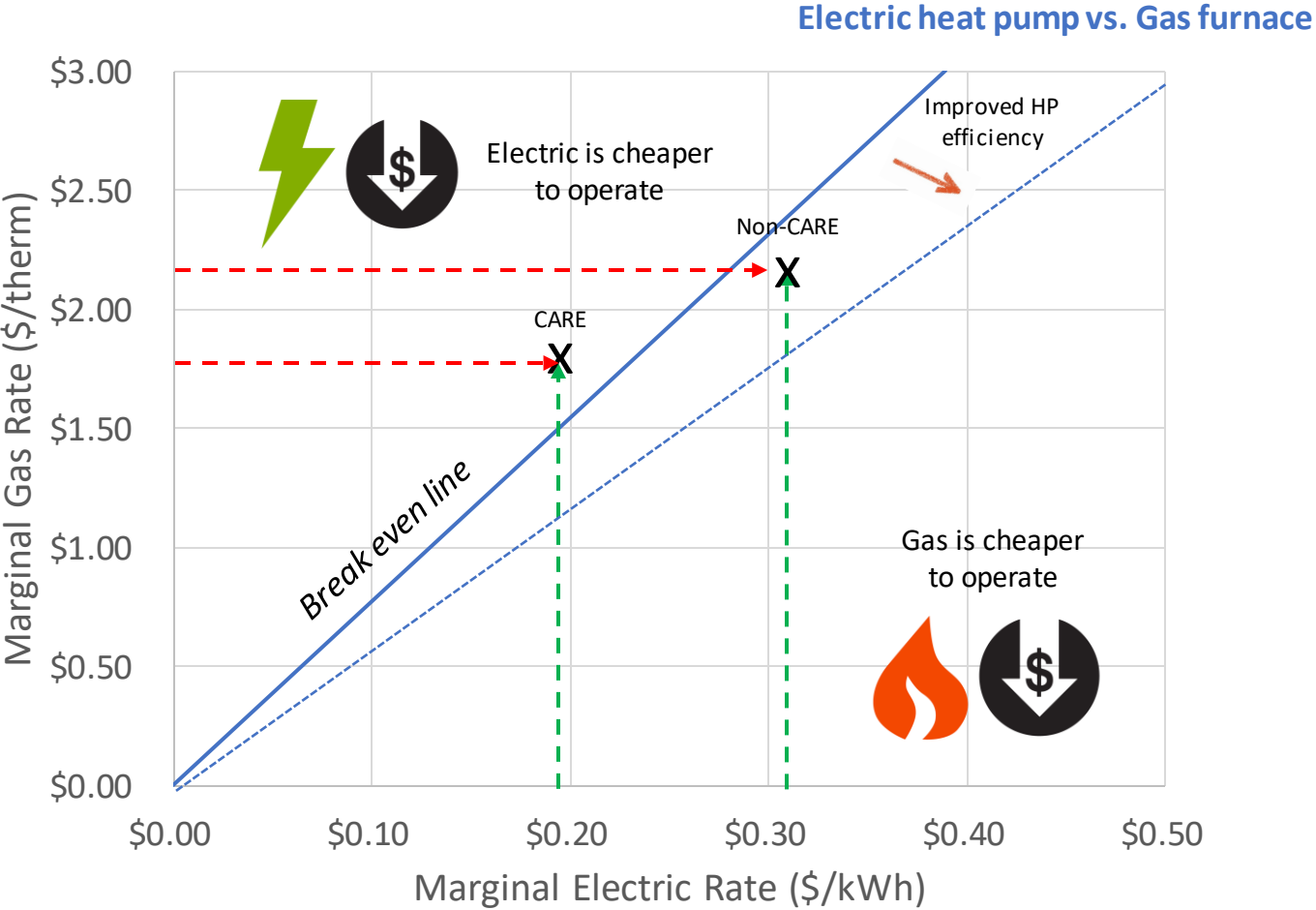
Fossil Fueled	Electric	Break even
80 AFUE furnace	HSPF 10 heat pump	28.4¢/kWh
0.63 EF tank WH	3.0 UEF HPWH	36.9¢/kWh
0.81 EF tankless WH	3.0 UEF HPWH	28.7¢/kWh
25.4 MPG avg. new car	99 MPGe EV	53.2¢/kWh
52 MPG hybrid	120 MPGe EV	31.5¢/kWh

Today’s avg residential rates (PG&E): 30.9¢/kWh for E-1; 19.4¢/kWh for CARE

Assumptions:

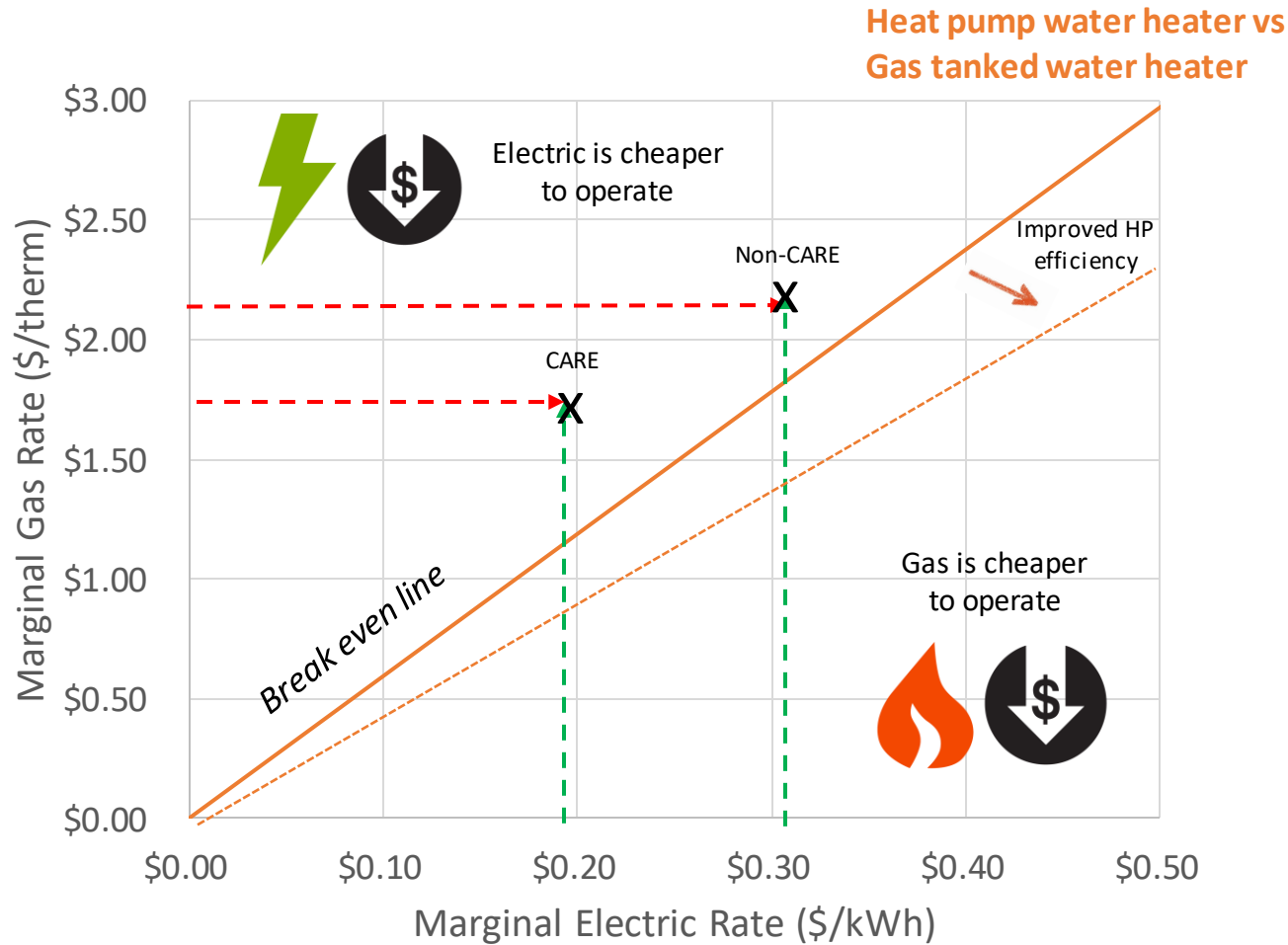
- Gas rates are PG&E’s 2022 annual average estimates: \$2.20/therm
- Gasoline prices from the Jan. 31 AAA survey for CA: \$4.64/gallon
- Assume equipment performs according to its rating or specification

Estimated operating cost break even line for space heating



PG&E's ave electric rates: 30.9¢/kWh for E-1; 19.4¢/kWh for CARE (35% discount)
[PG&E's 2022](#) ave gas rates: \$2.20/therm non-CARE, \$1.76/therm CARE (20% discount)

Estimated operating cost break even line for water heating



PG&E's ave electric rates: 30.9¢/kWh for E-1; 19.4¢/kWh for CARE (35% discount)

[PG&E's 2022](#) ave gas rates: \$2.20/therm non-CARE, \$1.76/therm CARE (20% discount)

Contact:

Merrian Borgeson mborgeson@nrdc.org

Julia De Lamare jdelamare@nrdc.org

Mohit Chhabra mchhabra@nrdc.org