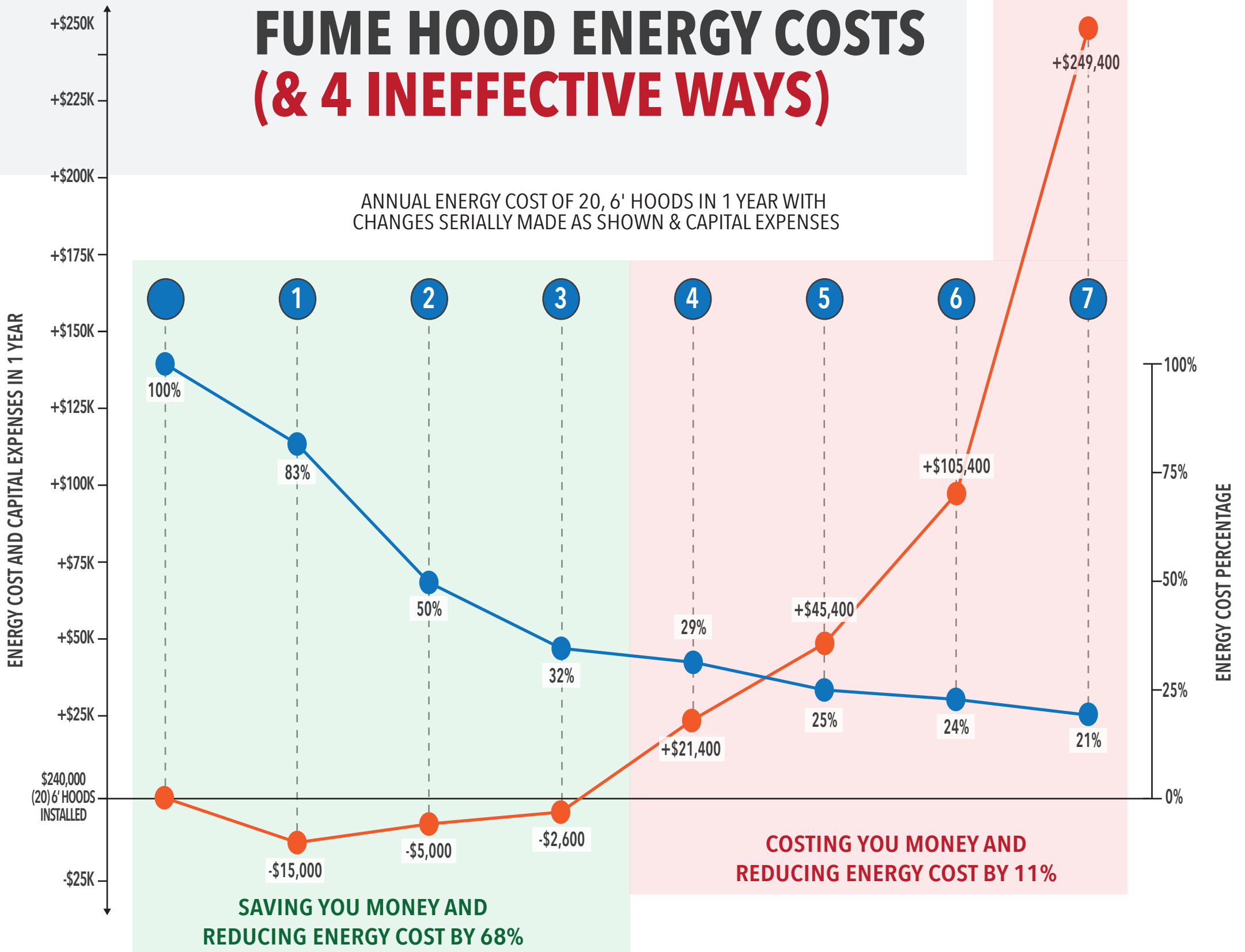


THREE COST EFFECTIVE WAYS TO SAVE MONEY ON FUME HOOD ENERGY COSTS (& 4 INEFFECTIVE WAYS)



- 1 ORDER NARROWER HOODS**
 Step back hoods to one foot narrower than originally planned. These smaller hoods will on average use **17%** less energy (capital cost savings **\$15,000**)
- 2 REDUCE HOOD FACE VELOCITY FROM 100 FPM TO 60 FPM**
 All FSI hoods will pass published containment standards at this lower face velocity. Such hoods usually cost a bit more, but dramatically reduce exhaust and save a lot of money each year on energy bills, **33.2%** to be precise (**\$10,000** cost)
- 3 ALLOW HOOD PROCEDURES AT A MAXIMUM 18" OPENING OR LOWER (SASH STOP)**
 Make larger sash openings available only for set-ups when no fume-evolving procedures are present. Implementing this change saves an additional **17.8%** (**\$2,400** cost)
- 4 REDUCE WEEKEND HOOD EXHAUST TO 40 FPM**
 Obviously, this presumes the facility is largely vacant on weekends. Because of earlier savings, this does not add a lot of savings, just **3.1%** (**\$24,000** cost)
- 5 WEEKDAY AFTER-HOURS REDUCTION OF EXHAUST TO 40 FPM**
 Because of earlier savings, this does not add a lot of savings, just **4.4%** (at a cost of **\$24,000**)
- 6 APPLY EXHAUST HEAT RECLAMATION TECHNOLOGY TO FUME HOOD EXHAUST**
 This is costly technology to install and yields little savings, no more than **0.1%** (**\$60,000** cost)
- 7 INSTALL VAV HARDWARE AND AUTO SASH CLOSING EQUIPMENT**
 Because of all previous technologies applied to fume hoods, there is only about **3.5%** energy savings left to save with this expensive step (**\$144,000** cost)

CONCLUSIONS:

- SMALLER HOODS, LOWER SASH OPENINGS, AND LOWER FACE VELOCITIES CUT FUME HOOD EXHAUST BY **68%**, THE REMAINING FOUR STRATEGIES COMBINED ADDED ANOTHER **11%**.
- THESE THREE STEPS HAVE **NO TOTAL CAPITAL COST!** (SEE CHART)
- THE REMAINING FOUR STRATEGIES SHOW SINGLE DIGIT ENERGY SAVINGS AND HAVE HIGH CAPITAL COST.
- **CONTACT FLOW SCIENCES TODAY TO SAVE 68% ON ENERGY COSTS AT NO CAPITAL COST**