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## Which idling reduction technologies are the best?

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## Benefits depend on fuel and capital costs, idling hours, and location

- •All idling reduction options save truck owner money and reduce emissions
- •For low idling times, capital-intensive systems slow to pay back (see graph)
- For high idling times, operating cost is key factor
- Emissions occur at truck and upstream
  - Differ for heating and cooling
  - •Differ by state-- heating/cooling mix, power generation mix, urban vs. rural locations
- Heater plus energy storage air conditioner beneficial under all conditions

Annual savings and emission reductions (1000 h/y idling 2007 truck in CA, 5 year loan, fuel \$4.50/gal)



