

Performance Gains of CleanCook (CC) Ethanol Stove over Other Stoves (5-liter WBT; pot without lid)*			
Baseline is 3-stone fire	Reductions by CC Stove	Improvement in Performance	Conclusion
Energy use	69.00%	321.00%	CC is 3 times more efficient
PM emissions	99.80%	41850.00%	CC is over 400 times cleaner
CO emissions	93.40%	1300.00%	CC is 13 times cleaner
Baseline is StoveTec Rocket	Reductions by CC Stove	Improvement in Performance	
Energy Use	50.80%	202.00%	CC is 2 times more efficient
PM emissions	99.50%	19575.00%	CC is 196 times cleaner
CO emissions	75.00%	400.00%	CC is 4 times cleaner
Baseline is Charcoal Jiko	Reductions by CC Stove	Improvement in Performance	
Energy Use	64.40%	280.80%	CC is 2.8 times more efficient
PM emissions	98.40%	6275.00%	CC stove is 63 times cleaner
CO emissions	95.10%	2040.00%	CC stove is 20 times cleaner
Baseline is Wood/Charcoal Rocket Combo	Reductions by CC Stove	Improvement in Performance	
Energy Use	46.00%	185.30%	CC is 1.8 times more efficient
PM emissions	91.00%	1100.00%	CC is 11 times cleaner
CO emissions	87.90%	820.00%	CC is 8.2 times cleaner

Performance Gains of CleanCook (CC) Ethanol Stove over Other Stoves (5-liter WBT; pot without lid)*			
Baseline is Forced Air (Fan) Stove	Reductions by CC Stove	Improvement in Performance	
Energy Use	44.30%	179.40%	CC is 1.8 times more efficient
PM emissions	96.70%	3040.00%	CC is 30 times cleaner
CO emissions	22.00%	128.00%	CC is 1.3 times cleaner
Baseline is Gasifier Stove	Reductions by CC Stove	Improvement in Performance	
Energy Use	56.40%	229.40%	CC is 2.3 times more efficient
PM emissions	97.30%	3687.50%	CC is 37 times cleaner
CO emissions	71.50%	350.00%	CC is 3.5 times cleaner
Baseline is Kerosene Stove	Reductions by CC Stove	Improvement in Performance	
Energy Use	29.90%	142.60%	CC is 1.42 times more efficient
PM emissions	60.00%	250.00%	CC is 2.5 times cleaner
CO emissions	37.50%	160.00%	CC is 1.6 times cleaner

MacCarty N, Still D, Ogle D. Fuel Use and Emissions Performance of Fifty Cooking Stoves in the Laboratory and Related Benchmarks of Performance. Energy for Sustainable Development 2010;14:161–71.

<http://www.sciencedirect.com/science/article/pii/S0973082610000311>

<http://www.mendeley.com/research/fuel-emissions-performance-fifty-cooking-stoves-laboratory-related-benchmarks-performance/>

* The 5-liter WBT with uncovered pot favors higher over lower-powered stoves because lower powered stoves take longer to boil water and this is pronounced with an uncovered pot. This is because more heat is lost from an uncovered pot than a covered pot. The WBT does not account for this heat loss. The CleanCook stove is powered above a charcoal or kerosene stove but below most wood-burning stoves.