

Project  
CDM Cookstoves [Country]

Scenario Assumptions

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Sales, Partner Org 1	-	-	-	-	-	-	-	-			
Sales, Partner Org 2	-	-	-	-	-	-	-	-			
Sales, Partner Org 3	-	-	-	-	-	-	-	-			
Sales, Partner Org 4	-	-	-	-	-	-	-	-			
Total Annual Sales for All Partners:	-	-	-	-	-	-	-	-			
Total Annual Carbon Volumes (tCO2e):	0	0	0	0	0	0	0	0			
Index for Sales Numbers	100%										
Program Start Year (operational)	2011										
Program Registration Date (crediting begins)	2012										
Product Age:											
Usage Rate at End of Year	Age 0 - 1	Age 1 - 2	Age 2 - 3	Age 3 - 4	Age 4 - 5	Age 5 - 6	Age 6 - 7	Age 7 - 8	Age 8 - 9	Age 9 - 10	
Average Usage by Product Age	90%	90%	80%	65%	45%	20%	0%	0%	0%	0%	
Leakage in ER per year	95.0%	90.0%	85.0%	72.5%	55.0%	32.5%	10.0%	0.0%	0.0%	0.0%	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

VARIABLES FOR	$ER_y = B_{y,savings} \cdot f_{NRB,y} \cdot NCV_{biomass} \cdot EF_{projected\_fossilfuel}$	AND	$B_{y,savings} = B_{old} * (1 - \frac{SC_{new}}{SC_{old}})$
	value	units	notes
Non-Renewable Biomass ( $f_{NRB,y}$ )	70.0%	percentage	Study
NCV biomass	8.0156	TJ/t	IPCC default
Emissions Factor ( $EF_{projected\_fuel}$ )	61.6	(t CO2/TJ) <sup>20</sup>	IPCC default
Traditional equiv stove - Consumption Rate ( $SC_{old}$ )	20.0000	rate	Controlled Cooking Test
Improved stove - Consumption Rate ( $SC_{new}$ )	10.00	rate	Controlled Cooking Test
	per HH		
$B_{savings}$ (ton wood-equivalent/year)	3.20		
$B_{old}$ (ton wood-equivalent/year)	6.39	Conservativeness: For validation purposes consider bold as half of biomass self-reported.	
Leakage factor	0.95	applied to $B_{old}$	
Emission Reductions	per stove/year		
TOTAL	2.746	accounts 100% usage	

SSC-CDM METHODOLOGY CAP	Value	Units
Energy Cap (SSC-CDM Methodology limit)	160	GW <sub>th</sub> per annum
Converted Energy Cap (SSC-CDM Methodology limit)	649.82	TJ <sub>th</sub> per annum
CALCULATED PROJECT VALUES UPON CAP		
Energy Generation and Energy Savings (*)	Value	Units
Energy generation by traditional equivalent stove ( $B_{old} \cdot NCV_{biomass}$ )	0.028	GW <sub>th</sub> /year
Energy generation by improved stove ( $B_{old} \cdot NCV_{biomass} \cdot SC_{old}/SC_{new}$ )	0.055	GW <sub>th</sub> /year
Energy savings per improved stove (account 100% usage)	-0.028	GW <sub>th</sub> /year
Stove Installation Cap		
Improved stoves installation cap per year (accounts 100% usage )	(6,519)	per year
Emissions Reductions Cap		
Calculated CDM small scale ER limit	(17,626.96)	CERs per year

percentage of the type II limit  
-0.02

Other unit converters  
1 tonne<sub>wt</sub> = 0.28 gigawatt hour  
1 year = 365 days stoves are used

# Simplified Emissions Reductions Calculator

Annual Assumptions	Project Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Partner Org 1		-	-	-	-	-	-	-	-	-	-	-
Partner Org 2		0	0	0	0	0	0	0	0	0	0	-
Partner Org 3		0	0	0	0	0	0	0	0	0	0	-
Partner Org 4		0	0	0	0	0	0	0	0	0	0	-
Total Product Units Sold Per Year		-	-	-	-	-	-	-	-	-	-	-
Total Annual ER Volumes (tCO2e):		0	0	0	0	0	0	0	0	0	0	0
ERs/Product-Year (weighted by stove sales, acci	#DIV/0!											
TOTAL IN USE		0	0	0	0	0	0	0	5 Year total	0	0	0
									10 year total			
"Pers" Analysis	Product Age: Usage:	Age 0 - 1 95%	Age 1 - 2 90%	Age 2 - 3 85%	Age 3 - 4 73%	Age 4 - 5 55%	Age 5 - 6 33%	Age 6 - 7 10%	Age 7 - 8 0%	Age 8 - 9 0%	Age 9 - 10 0%	Age 10 - 11 0%
Carbon Price	\$12.00											
Annual Product Carbon Value	32.46	30.83	29.21	27.59	23.53	17.85	10.55	3.25	-	-		
Discount Rate	10%											
NPV	\$107.67											
Installed Product Cost												

Product Units in Use by Age and Year Sold		Average Usage by Age										
		Age 0 - 1	Age 1 - 2	Age 2 - 3	Age 3 - 4	Age 4 - 5	Age 5 - 6	Age 6 - 7	Age 7 - 8	Age 8 - 9	Age 9 - 10	Age 10 - 11
Year Sold	Units Sold	95%	90%	85%	73%	55%	33%	10%	0%	0%	0%	0%
2012	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-

Product Years Accumulated Yearly	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Year Sold											
2012	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-
Total Product Years Accumulated	-	-	-	-	-	-	-	-	-	-	-

ER Volume Results											
CO2e Credits Per Product/Year (does not accou	2.70										
Total Annual ER Volumes (tCO2e):	-	-	-	-	-	-	-	-	-	-	-
									5 Year total	-	-
									7 Year total	-	-
									10 year total	-	-

## General Assumptions for Product Year Calculations

Product volume sold each year is divided into four equal batches, sold each quarter.

New product batches come into use on the middle day of each quarter (i.e., Feb 15, May 15, August 15, November 15)

Summation of ER

Non-Institutional Stoves	2011	2012	2013	2014	2015	2016	2017	2018
projected amount sold	-	-	-	-	-	-	-	-
Total ER (t CO2/y)	-	-	-	-	-	-	-	-
Energy Savings per year (GWh <sub>oil</sub> /y)	-	-	-	-	-	-	-	-
Leakage ER (tCO2/y)	-	-	-	-	-	-	-	-

	Ers	Leakage	Overall
2013	-	-	-
2014	-	-	-
2015	-	-	-
2016	-	-	-
2017	-	-	-
2018	-	-	-
2019	-	-	-
TOTAL	-	-	-
AVG	-	-	-