

Emissions reductions – indoor air pollution paradox

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CDM Methodologies for Household Cooking Energy
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Improved cooking stoves

- Development-sector objectives
 - Sustainable development
 - Micro-environment
 - Health improvements – reduced exposure to IAP
 - ... Environment
- Carbon finance-sector objectives
 - Global environment
 - Emissions reductions (ER) & profit
 - ... Sustainable development
- M&E focus reflect objectives
- Complimentary?
 - ER α IAP

Fuel savings & ER don't always result in a reduction in IAP

1. Lower emissions concentrated into homes
 - A switch from cooking outdoors to a more efficient stove used indoors
 - Chimney stove to a more efficient chimneyless stove
2. Overall efficiency improvements at the cost of combustion efficiency

	3 stone fire	Ghana wood stove
Fuel used (g)	1126	875
CO (g)	56	50
PM (g)	2363	4287

(Source: Dean Still, Aprovecho)

3. Other factors
 - Increased use of stove
 - Rate of emissions: higher concentrations/ peaks?

So what?

- Possibility of project registered for ER but which increases IAP
- Loophole?
- Reputational issue

What makes this a complex issue?

- Emission factor & ER calculations
- By how much should emissions be reduced?
 - WHO / National Air Quality Guidelines?
- Safety or development issue?
 - Safety: Gold Standard/ CDM regulators
 - Development: DNA
- Who is responsible?

Way forward

Options:

1. Mandatory IAP testing for all projects?
 - Cost? Different methods. Is prohibitive cost a myth?
2. Filter checklist to flag high-risk interventions?
 - Some scenarios blacklisted
 - Certain types of project flagged for detailed monitoring
 - Others pass through filter to continue as today.

... No doubt many more.

Key: Minimum standard of equal or better indoor air quality post intervention.