Can we talk about social carbon?

A few field experiences from GERES

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GERES in a nutshell…

- *Group for the Environment, Renewable Energy and Solidarity*
- International solidarity and development NGO
- Created in 1976 in France, after the first oil shock
- 5 operational themes: RE; EE; CC; Economic development and Policy and Land Use

An **engineering of development** and a specific **technical expertise**	Focus both on **environment** and **livelihoods**	In partnership with **communities and local actors**

- Budget in 2013 : €10 million
- Headquarters at Aubagne (France) and local offices in 9 countries

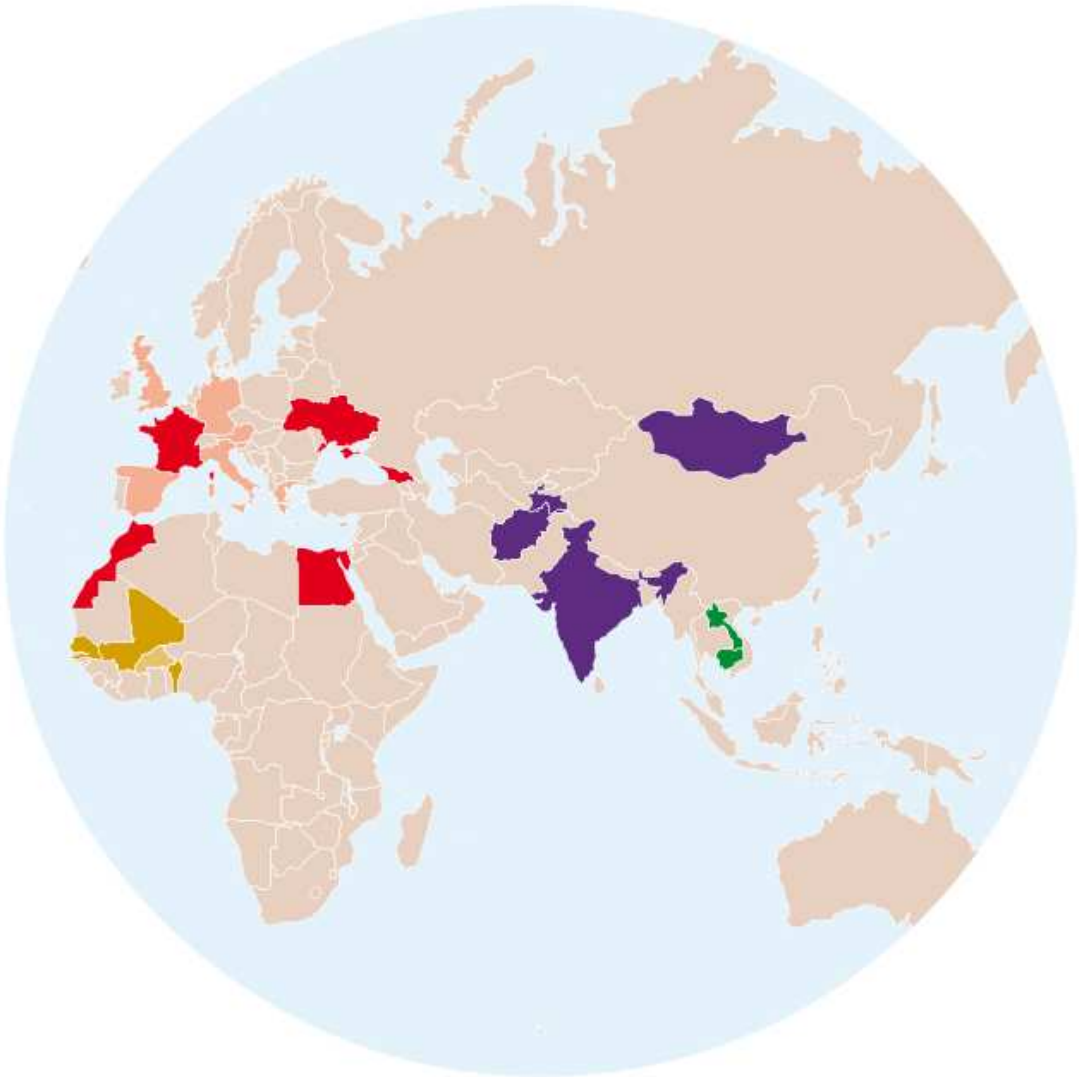
GERES in the world

Local offices

- Afghanistan
- Benin
- Cambodia
- France
- Indian Himalayas
- Mali
- Morocco
- Mongolia
- Tajikistan

Other areas of intervention

- Egypt
- Burkina Faso
- Georgia
- Laos
- Senegal
- Ukraine



Intervention	Direct	Indirect
EUROPE-MEDITERRANEAN		
SOUTH-EAST ASIA		
CENTRAL ASIA		
WEST AFRICA		

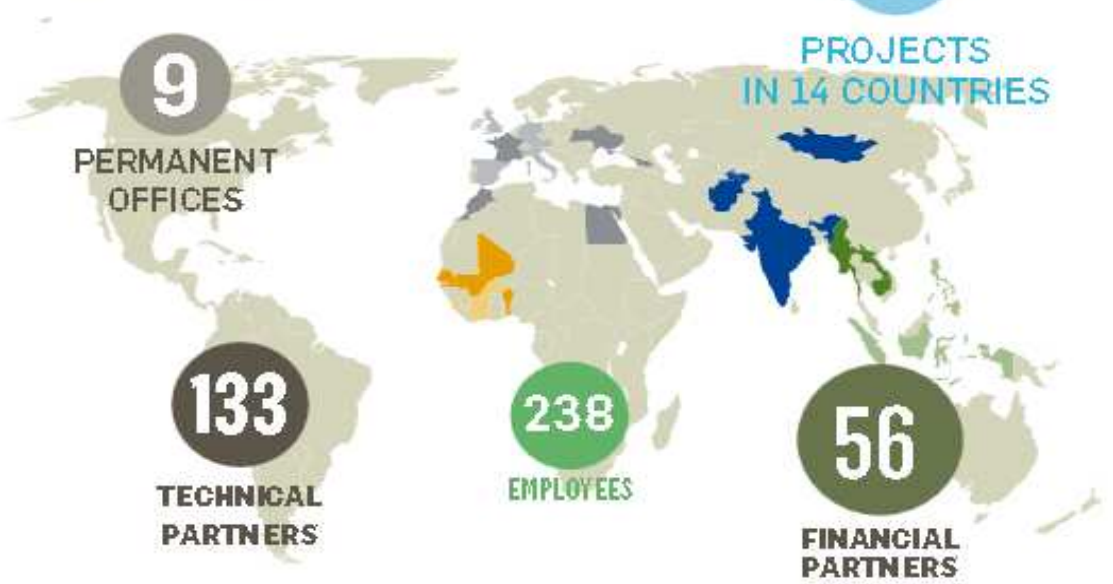
Key figures (2013)

589,647
Families or project developers benefiting directly*

3,304
entrepreneurs or enterprises supported or assisted*

71
PROJECTS IN 14 COUNTRIES

9
PERMANENT OFFICES

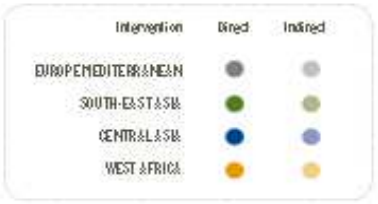


133
TECHNICAL PARTNERS

238
EMPLOYEES

56
FINANCIAL PARTNERS

2,774,120
indirect beneficiaries*



Climate Change, Energy Savings and Efficiency

Statements

- Heavy **pressure on natural resources and growing vulnerability to climate change, as well as reduced resilience**
- **Combining efforts to fight against CC and poverty**, once the more **vulnerable** is the community, the less efficient the equipment and the greater is the **share of the budget** devoted to energy expenditure
- **Historical responsibility of rich countries and need to leap-frog to low carbon technologies**

Solutions

- **Disseminating efficient and less emitting appliances** to make the best use of energy and reduce GHG
- Advocating North-South solidarity in climate policy
- **Measuring and minimizing** energy consumption and GHG without sacrificing convenience or comfort; and when possible, increase comfort
- **Providing information and raising awareness**
- **Carrying out action research to improve health and gender related issues**

NLS project in Cambodia - Key Information

Status: Ended

Market: voluntary - VCS

Methodology: CDM AMS II.G

Crediting period: 2003 to 2013

Estimated users: more than 800,000 people

Number of units: over 2.4 million units

Number of producers: 32

tCO2e reduced: 2 million

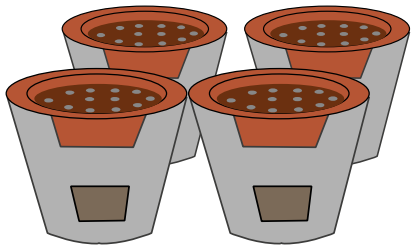
Income: US$11.8 million

Employed to expand the improved cookstove project into an integrated national biomass energy strategy

Today: evolvements towards a rocket stove.

NLS project - Monitoring system

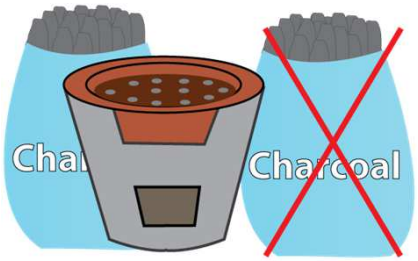
CO_2 calculations =



Number of ICS in use

National users survey

×



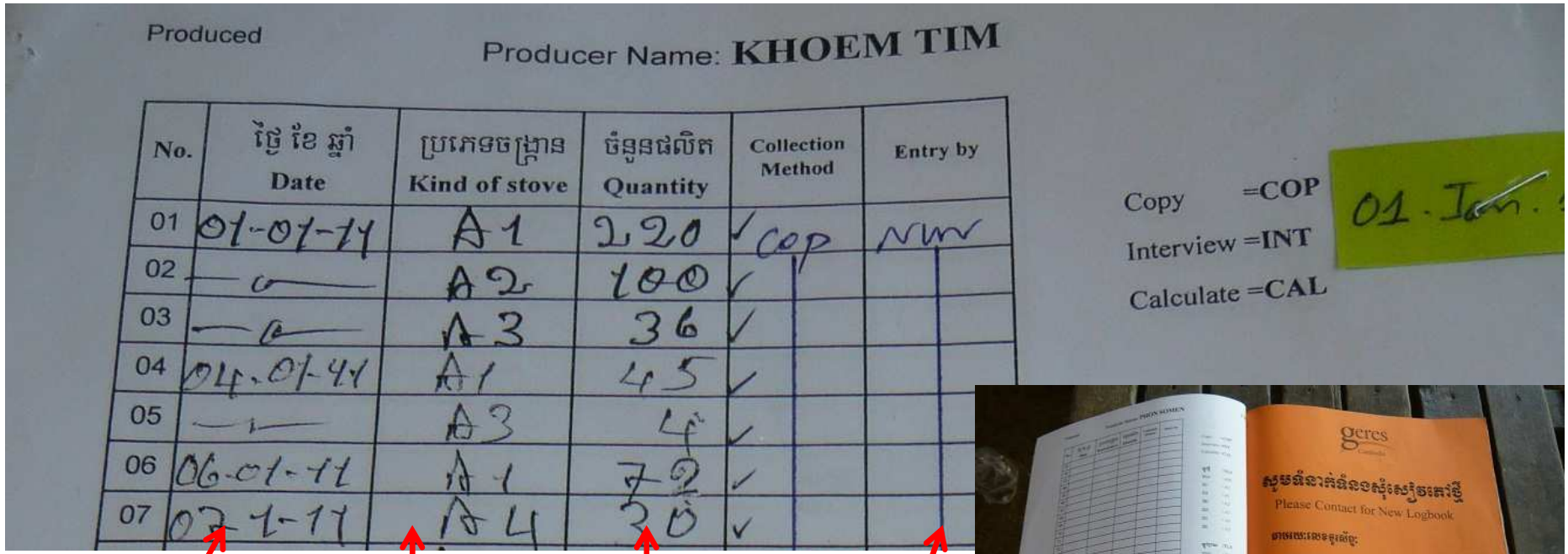
Woodfuel savings

Multiplied by NCV and GHG Emissions factors

×

Sustainability of woodfuels

Number of ICS in use and tracking system



Produced

Producer Name: KHOEM TIM

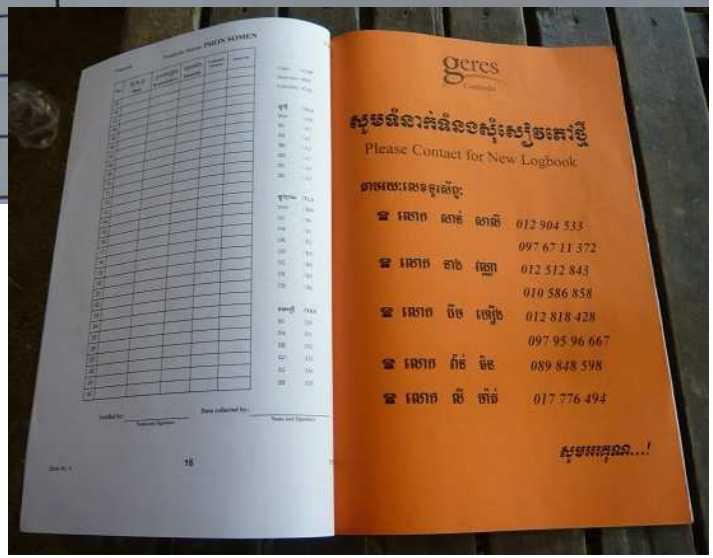
No.	ថ្ងៃ ខែ ឆ្នាំ Date	ប្រភេទចង្ក្រាន Kind of stove	ចំនួនផលិត Quantity	Collection Method	Entry by
01	01-01-11	A1	120	✓ COP	NW
02	— " —	A2	100	✓	
03	— " —	A3	36	✓	
04	04-01-11	A1	45	✓	
05	— " —	A3	4	✓	
06	06-01-11	A1	72	✓	
07	07-1-11	A4	30	✓	

Copy =COP

Interview =INT

Calculate =CAL

01 - Jan -



Date

Size

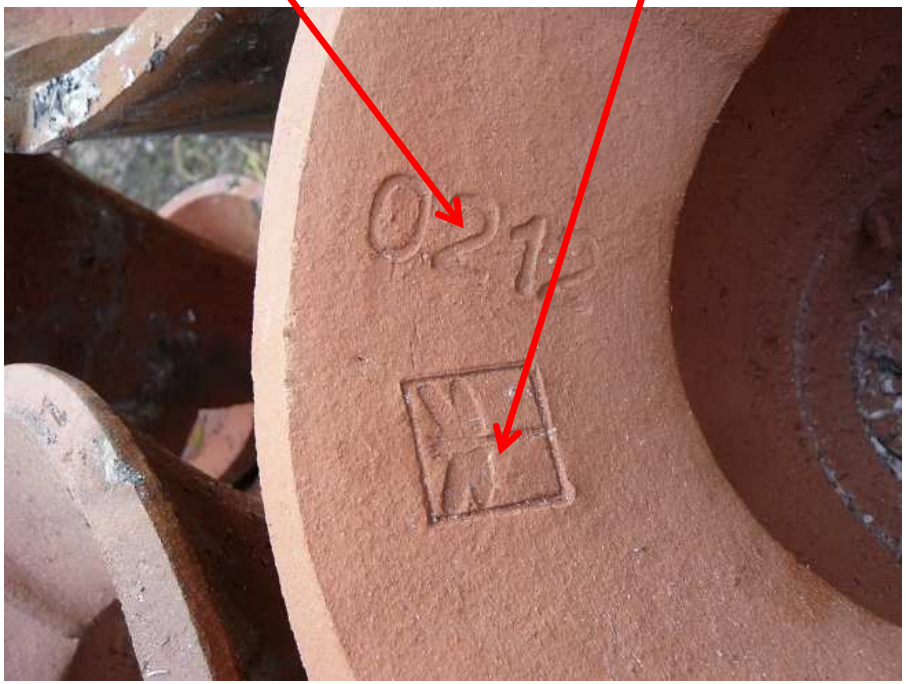
Quantity produced

Q/C

Number of ICS in use/Lifespan

Year and month of production

Producers' logo

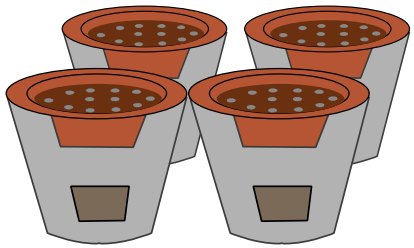


Unique ID number

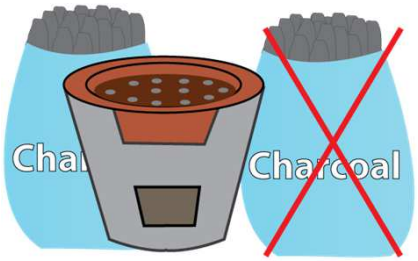
Number of ICS in use
End-users tracking system

NLS - Monitoring system

Environmental impacts of ICS projects



Number of ICS in use



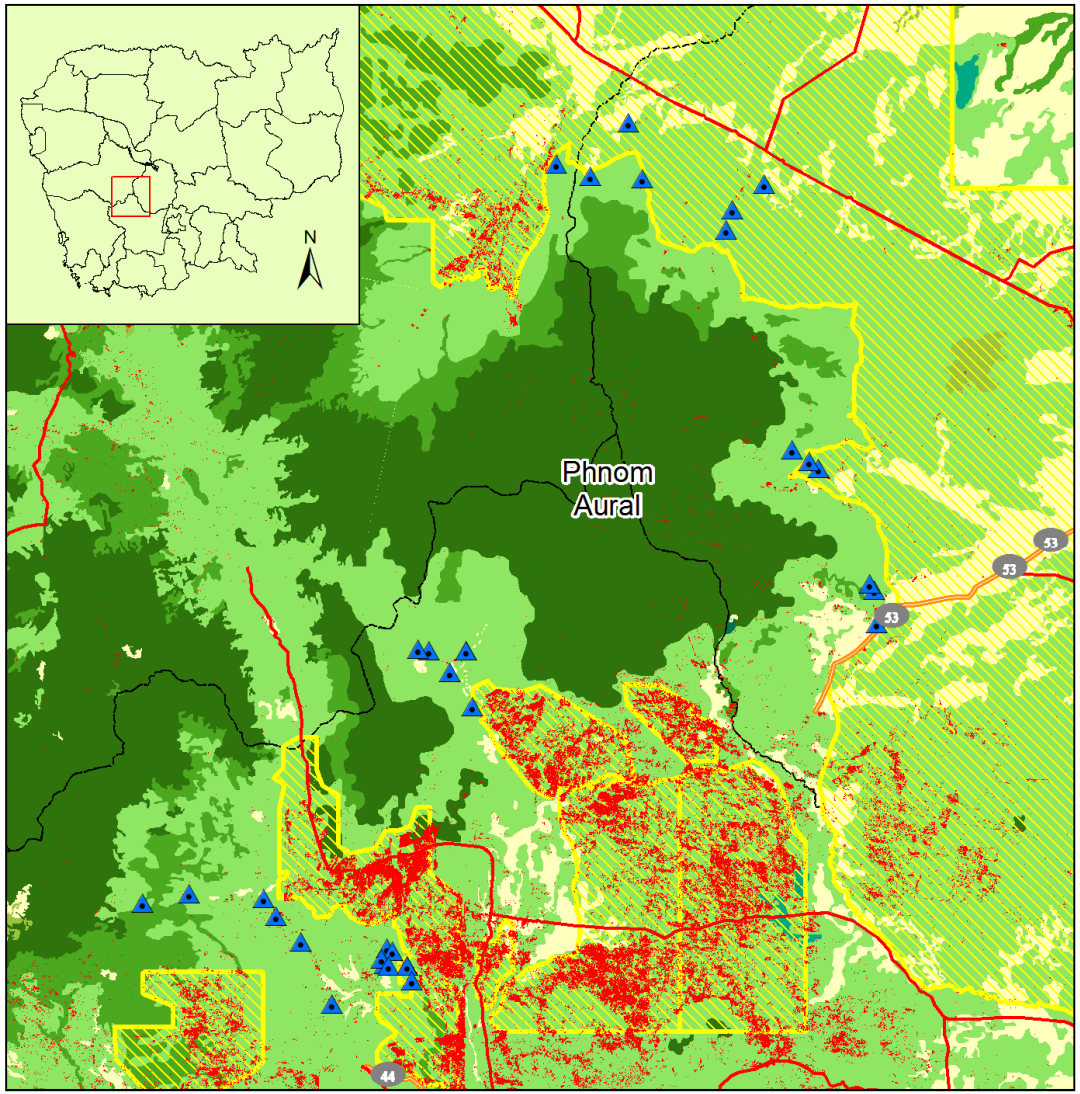
Woodfuel savings

- Perfomance tests
- Baseline consumption

Sustainability of woodfuels

- National users survey

Fraction of Non-Renewability of Biomass



Legend

Forest cover loss 2002-2012

Wood collections area for charcoal production

Economic Land Concession

Global Forest Watch project (GERES, 2014)

PoA for Local Improved Cookstoves in West Africa
Key Information

Status: Registered CDM and finishing GS Validation
Starting the monitoring system

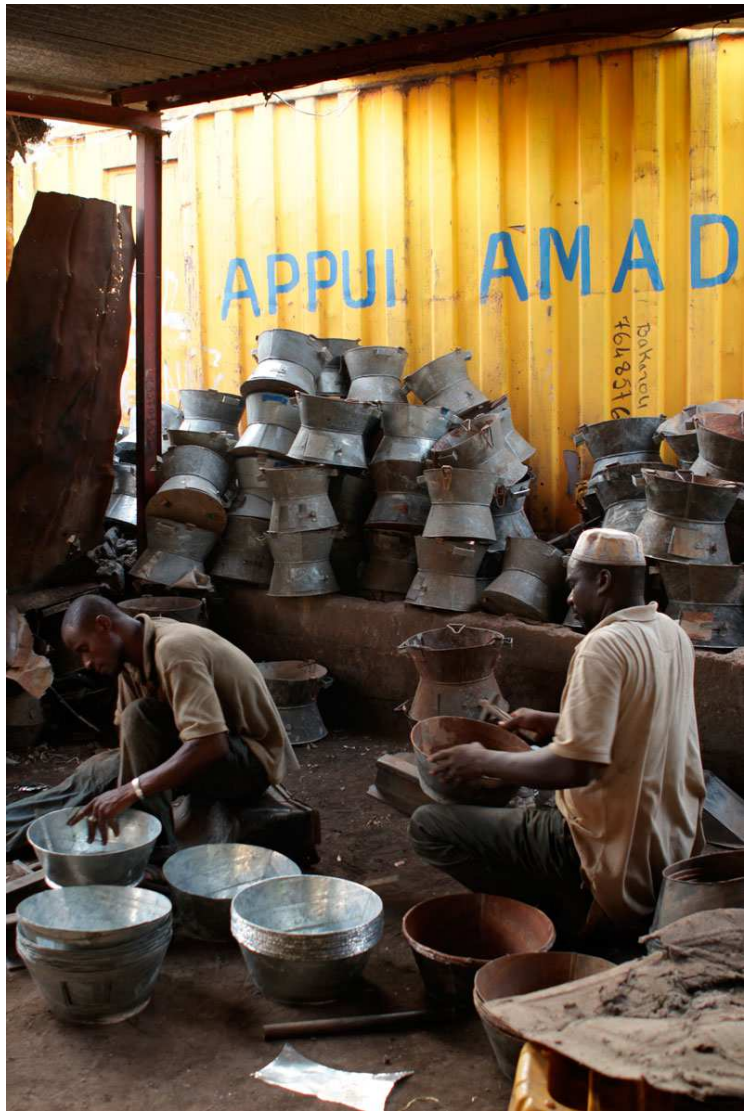
Market: CDM+Gold Standard

Methodology: CDM AMS II.G

Crediting period: 7 years renewable

Number of engaged producers: 1

Expected tCO2e/y per CPA: 28,373



Governance improved mechanisms:

- Advisory Committee
- Improved transparency concerning the benefit-sharing

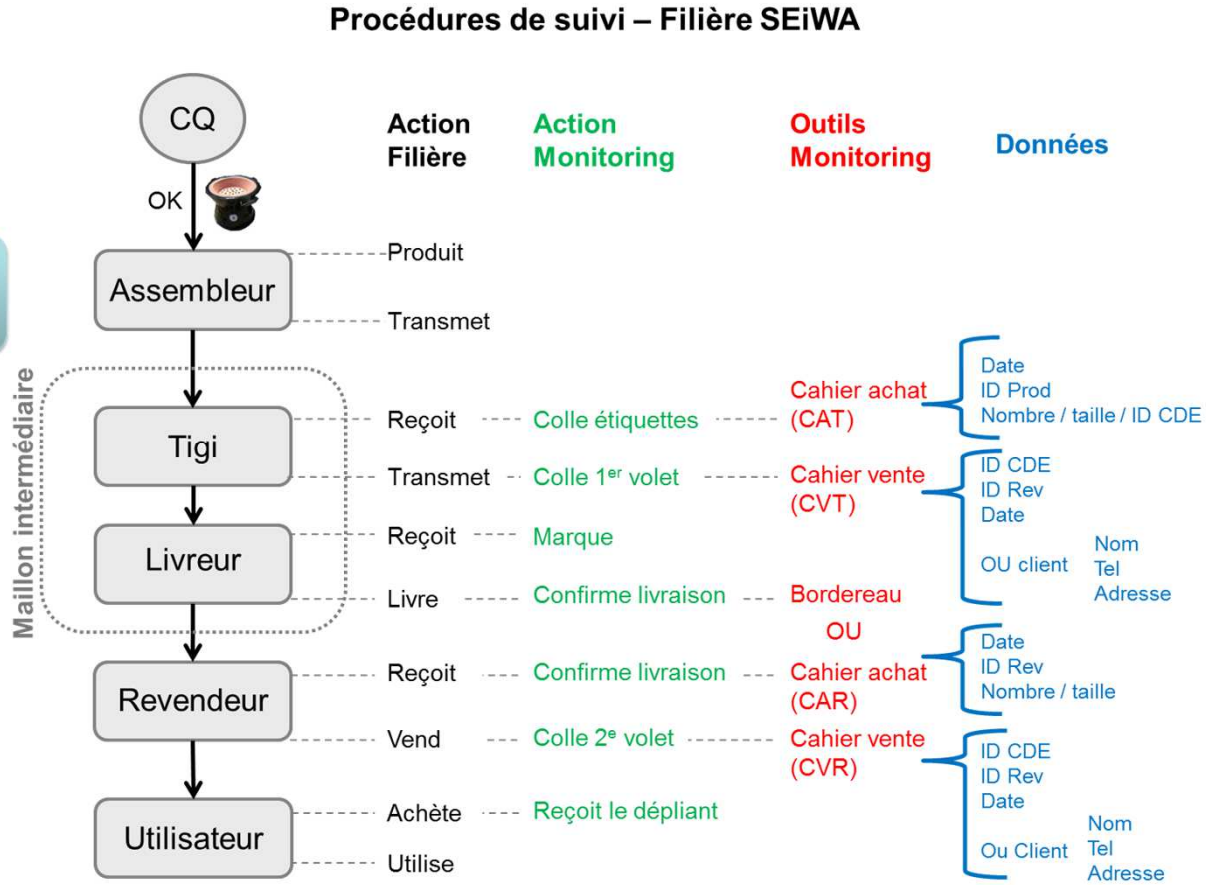
- Local Stakeholder Consultation
- Grievance mechanism
- Monitoring of social and environmental impacts

PoA for Local Improved Cookstoves in West Africa – Monitoring system

	Périodicité	Tâches	Responsable	Tâche bien exécutée?		Rôles		
				Oui	Non	Chargé de suivi	Entité de gestion	EOD
PHASE 1	Tous **les 2 jours**	Récolte de données chez le revendeur	**Agent de suivi**	Enregistrement dans la BD	AC1	Vérification de la BD		
PHASE 2	Toutes **les semaines**	Récolte de données chez le producteur	**Agent de suivi**	Enregistrement dans la BD	AC1	Vérification de la BD		
PHASE 3	Toutes **les 3 mois**	Rapport du suivi des phases 1 et 2	**Chargé de suivi**	Transmission à l'EG	AC2	Rédaction du rapport de suivi trimestriel	Examen et enregistrement du rapport de suivi trimestriel	
PHASE 4	Toutes les **années**	Tests de performance – KPT (Variables: By, baseline_tech, Ny, all, By, new)	**Chargé de suivi**	Saisie et analyses	AC3	Rapport des KPT	Examen et enregistrement du rapport + rédaction du rapport de suivi	Vérification annuelle
PHASE 5	Toutes les **2 ans**	Enquêtes usagers (Variables: U + Fnrb)	**Chargé de suivi**	Saisie et analyses	AC3	Rapport d'enquête	Examen du rapport et enregistrement des fichiers + rapport de suivi	Vérification annuelle

Légende: BD= Base de données;
AC1=Remplissage à nouveau des cahiers avec le revendeur ou producteur; AC2= reprise du rapport de suivi trimestriel; AC3= Reprise d'une partie de l'enquête ou du KPT.

PoA for Local Improved Cookstoves in West Africa – Monitoring system



Passive Solar Housing in Kabul – Key information

Location: Kabul, Afghanistan

Period: 2012-2015

Technical partners: Solidarités Afghanistan Belgique

Financial partners: French Development Agency (AFD), Abbé Pierre Foundation

Objectives:
- Around 3'000 houses will be fitted out in Kabul by 2015
- Train masterbuilders, crafstman and support the supply-chain developpement (supporting the creation of grass roots associations)
- Construct demonstration buildings

Up to date
October 2014 -> 2'176 passive solar houses (including double-glazing) disseminated through the private sector R&D on new heating and baking bread stove, as well as metal frame and glass verandas.

To reach the same indoor temperature, PSH are estimated to save 0.54 tCO_2e/year when compared to non-PSH.

For the same energy consumption, PSH have shown to increase in 3° C the indoor temperature when compared to non-PSH.

MDG and the PSH technology

WHO recommends 18° C
with up to 20-21° C for more vulnerable

Objective: Achieve the minimum services levels
- Suppressed demand

Benefits of the Attached Greenhouse
- Increase indoor temperature
- Insulation to avoid heat loss
  Replacing traditional heating
- Easy to build with locally available materials

Temperature	Health effects
24°C	Top range of comfort
21°C	Recommended living room temperature
<20°C	Mortality rate begins to rise
18°C	Recommended bedroom temperature
16°C	Resistance to respiratory diseases becomes weakened
12°C	More than two hours at this temperature raises blood pressure and increases heart attack and stroke risk
5°C	Significant risk of hypothermia

Winter Monitoring – Methodology and sampling

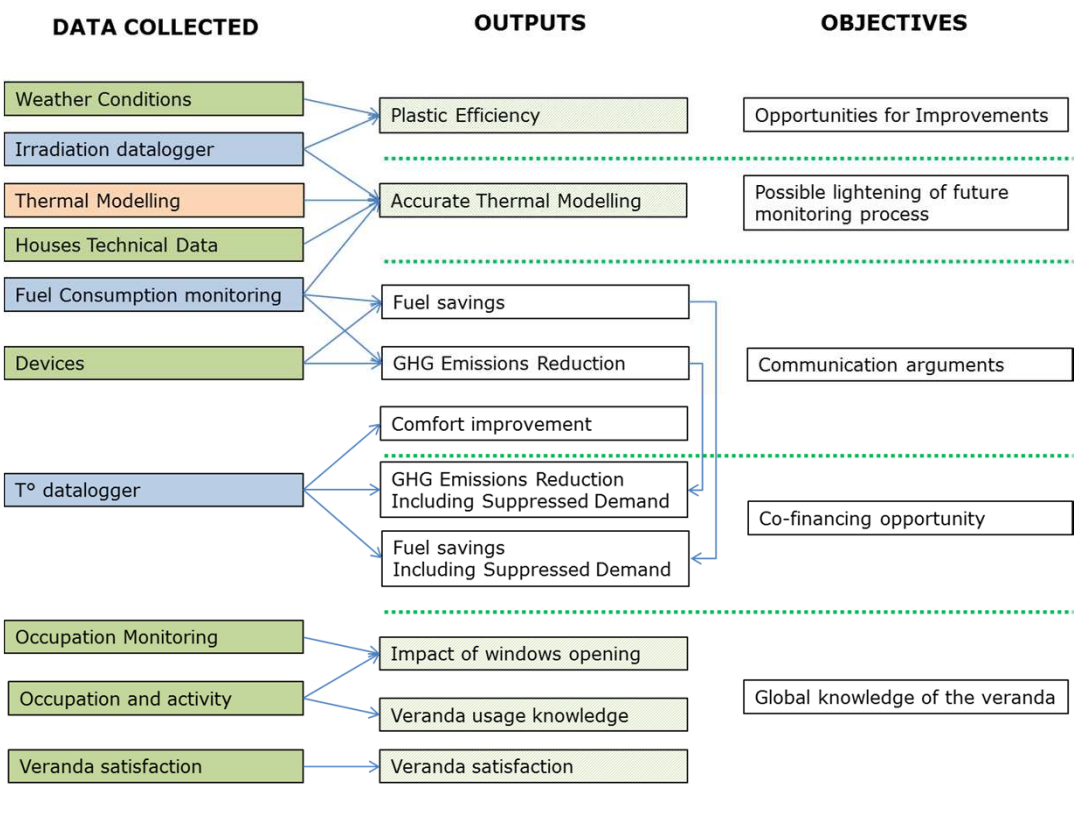
4 weeks/2 months of Temperature and Fuel monitoring during winter

Indoor and outdoor temperatures were measured using data loggers and daily fuel consumptions were measured

Statistical analysis respecting the **90/10** confidence interval rule

48 households in total: Without Veranda / With Veranda

Two sampling methods: paired and independent sample



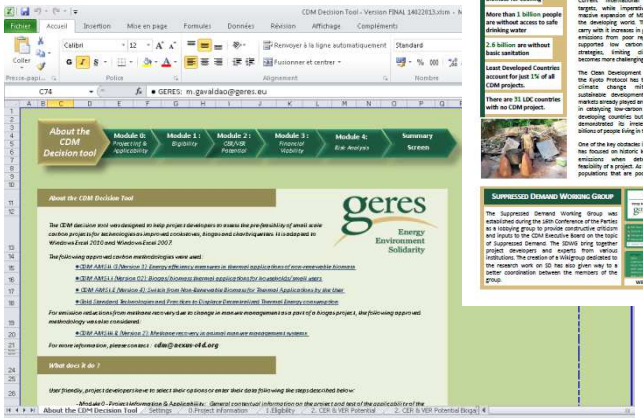
Other relevant work: advocacy

BUYERS' LEVEL:

- **CO2Solidaire: Climate solidarity and voluntary carbon offsetting platform**
- **InfoCC: Carbon offsetting information platform**

PROJECT DEVELOPMENT LEVEL:

- **Advocacy on suppressed demand**
- **Standardized Baselines**
- **Decision tools**
- **Participating at technical committees from carbon standard as for example Fairtrade**



Conclusions

So, can we talk about social carbon?

In my view, YES! Because not all carbon projects are similar

But is it the right time to do so? Isn't maybe too late?

Problems:

- Demand
- Visibility in terms of the new mechanisms (NMM, FVA, NAMAs?)
- Expensive and challenging monitoring systems for decentralized/portable technologies

Advantages:

- Strict control and overview on the supply-chain
- Support to development projects

But,

What's the point of scaling-up if carbon prices are higher for small/micro-scale projects?

Merci!

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