## **ASIA CLEAN ENERGY FORUM 2018**

HARNESSING INNOVATION TO POWER THE FUTURE

Manila, Philippines • 4-8 June 2018



## Deep Dive Workshop on Clean Cooking

5 June 2018 (Tuesday), 09.00 a.m. - 12.30 p.m.

Session 1: Best Practices and Solutions for scaling-up of Access to Clean

Cooking

Carlo Figà Talamanca CEO











SGFE produces char-briquettes from recycled biomass waste.



## A 120 YEARS OLD "INNOVATION"





- first invented and patented by Ellsworth B. A. Zwoyer of Pennsylvania in 1897
- Henry Ford used wood and sawdust by-products from automobile fabrication as a feedstock.
- Ford Charcoal went on to become the Kingsford Company, currently enjoying about 80% of USA market



# WHY HAS NEVER ANY COMPANY (PROJECT) SUCCEEDED TO PRODUCE AND SELL CHAR-BRIQUETTES IN A DEVELOPING COUNTRY WHERE THE MARKET OPPORTUNITIES ARE IMMENSE?

(besides SGFE...)

### **BARRIERS**

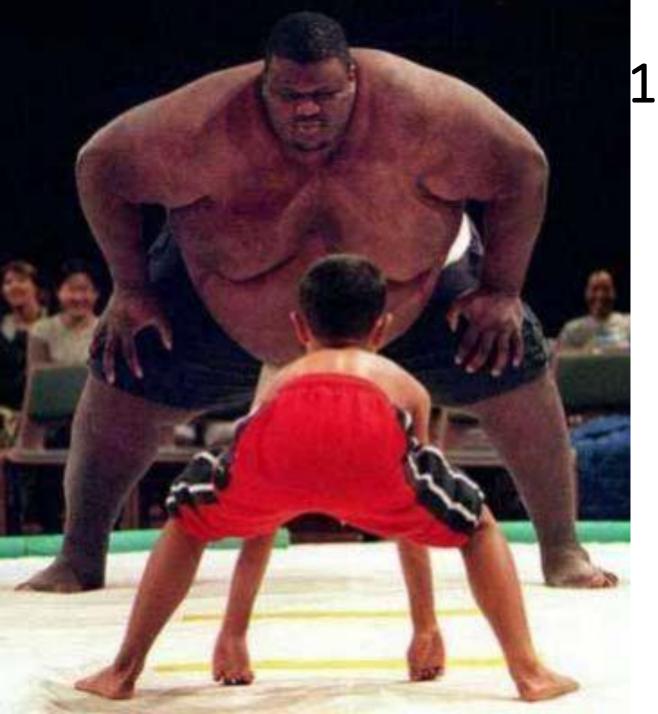


- 1. Competition with traditional charcoal
- 2. Top-down vs bottom-up approach
- 3. Technical assistance
- 4. Market approach
- 5. The rules of the game

**PRIVATE SECTOR** 

**DEVELOPMENT PARTNERS** 

**GOVERNMENT** 





**Competition with traditional** charcoal is based on:



and

**PRICE** 

# EXAMPLE: SGFE's char-briquettes compared to other "commercial" char-briquettes



#### 5.1 Fuel test results

Table 1: Physical properties and heating value / calorific value of the fuels

Fuel Id	%Moisture	%Volatile	% Analytical	%Fixed	Heating Value
	content	matter	ash	carbon	(KJ/KJ)
	8.6	19.6	32.8	39.0	19423
	7.6	20.8	31.8	39.8	19479
والمستعبد المستعبد ا	7.3	20.9	22.4	48.7	18709
	7.7	19.8	23.4	49.1	25105
	7.0	18.2	34.4	40.4	20714
	7.8	21.0	25.1	46.1	24007
	8.5	21.7	19.4	50.3	23980
SGFE	11.5	12.5	3.2	74.1	28757
Traditional charcoal	7.8	20.7	5.7	65.7	29405
	8.0	20.9	22.4	48.7	19845







VS



# "Bottom-up approach for solar cars"





### 3. TECHNICAL ASSISTANCE



# The usual technical assistance which is provided is:

- business planning
- marketing strategies
- etc.

# What is needed is literally **TECHNICAL** assistance such as:

- technical aspects related to quality briquettes production
- industrial engineering knowledge and mechanical skills to design, set-up and manage/operate an efficient and effective production process



## It's not rocket science, but....



Former interns of SGFE now work at:











### 5. THE RULES OF THE GAME

#### The biomass sector in developing countries:

Unsustainable



INFORMAL ECONOMY

Extremely low prices







Tax incentives for sustainable fuels in the formal economy have a crucial role for their competitiveness compared to traditional fuels which operate in the informal economy.

#### Thank you for your attention!

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